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ABSTRACT

As part of a nine-volume, six-state study of the impact of school finance reforms on minorities and the poor, the author examines the history and effects of finance reform in Texas. He presents a political and socioeconomic profile of the state and discusses past Texas school financing, the role of the Rodriguez v. San Antonio Independent School District decision, and the passage of Texas's 1975 school finance reform bill. To assess the bill's impact, data on educational revenues, school district wealth, tax effort, ethnicity, personal income, urban location, and school salaries are analyzed using correlation coefficients, percentiles, and averages. The author's analysis reveals (1) virtually no change in tax rates after the 1975 law; (2) slight decreases in spending disparities and wealth discrimination; (3) high levels of isolation of the poor and minorities, especially Mexican Americans; and (4) small decreases in revenue inequities among districts with different ethnic compositions but increases in inequity among districts with different income levels. Six problems are identified for Texas school financing, including district dependence on local funding, measurement of district wealth, per capita state allotments, and low levels of funding for compensatory education. (Author/RW)

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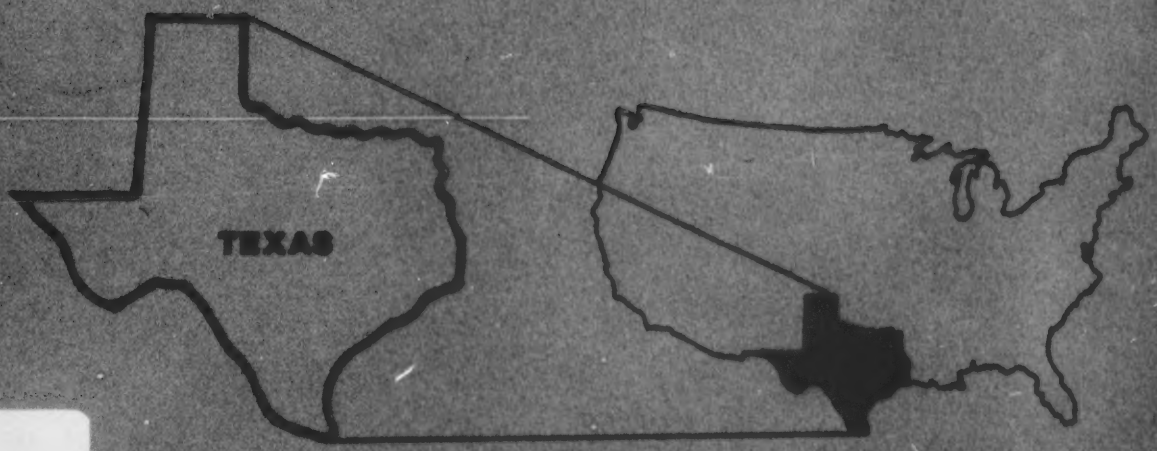
MINORITIES, THE POOR AND SCHOOL FINANCE REFORM

VOL. 2: THE IMPACT OF TEXAS' 1975 SCHOOL FINANCE REFORM ON POOR AND MINORITY CHILDREN

Robert Brischetto



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JULY, 1978

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IDRA
INTERCULTURAL DEVELOPMENT RESEARCH ASSOCIATION

MINORITIES, THE POOR AND SCHOOL FINANCE REFORM

Robert Brischetto, General Editor

VOLUMES

1. An Impact Study of Six States
   Robert Brischetto and David Vaughan
2. The Impact of Texas' 1975 School Finance Reform on Poor and Minority Children
   Robert Brischetto
3. The Impact of California's 1972 School Finance Reform on Poor and Minority Children
   Robert Singleton, Joseph O. Garcia and Ruben W. Espinosa
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   David Vaughan
5. The Impact of New Mexico's 1974 School Finance Reform on Poor and Minority Children
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   Robert Brischetto
8. A History of School Finance Reform Litigation and the Interests of Urban, Poor and Minority Children
   Paul R. Dimond
9. Summary and Conclusions
   Robert Brischetto

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PREFACE

The Intercultural Development Research Association (IDRA) with support from the National Institute of Education (Contract No. 400-76-0136) undertook a study of the impact of recent school finance reforms on poor and minority students in six states--California, Colorado, Florida, Michigan, New Mexico and Texas. The objective of the study was to track the distribution of dollars for education among districts with pupils of different ethnic and income groups from before to after "reform" legislation was implemented. The ultimate goal of this research was to inform policy makers on the state and federal levels about whether and to what extent legislative reforms of the first half of the 1970's have redistributed education resources in a manner which is more equitable for poor and minority students so that future policies might be measured by such a standard of equity.

The research, while sponsored by IDRA of San Antonio, was a cooperative effort with several school finance study projects originated by the National Urban Coalition (NUC) of Washington, D.C. Robert Bothwell, former director of the Education Finance Division of NUC, proposed this cooperative research effort. The purpose of the joint research effort was not only to study the impact of school finance reforms on poor and minority pupils, but also to provide the school finance reform projects with the data and statistical tools necessary to continue to monitor school finance legislation in their respective states well beyond the termination of this study.

The findings of the study are reported in nine volumes. This report (Volume 2) details the findings on the impact of the 1975 school finance law in Texas (HB 1126) on poor and minority children.

The effects of the Texas reform are compared with those of five other states in Volume 1: An Impact Study of Six States.

Volumes 3-6 are individual state reports on California, Florida, New Mexico and Colorado, respectively. These reports give an historical overview of school finance legislation, a detailed description of the reform, and an in-depth analysis of the outcomes of school finance legislation before and after reform in each state with particular concern for the distribution of funding as it affects districts with poor and minority students.

Volume 7: A Statistical Note on a New Case for Discrimination in Texas School Finance presents the methodology which might be adopted in court arguments to prove discrimination against poor and minority children in financing education.

Volume 8: A History of School Finance Reform Litigation and the Interests of Urban, Poor and Minority Children gives an overview of school finance reform litigation in the context of other educational reform litigation efforts in behalf of the poor and minority children.

Volume 9: Summary and Conclusions highlights the study's major findings and discusses their implications for future legislation in other states.

Robert Brischetto
Study Director
July, 1979

INTRODUCTION

The purpose of this study is to ascertain the impact of the 1975 school finance reform[1] in Texas on the distribution of educational resources among minority and poor children in the state's public schools. The report begins with a demographic and political profile of the state, followed by a history of school finance legislation and litigation leading up to the 1975 law. The provisions of the 1975 reform are described, and an empirical analysis of the changes in educational revenues and expenditures resulting from the reform is presented. The analysis examines the extent to which wealth-related disparities and inequalities among ethnic and income groups in different geographic locales have changed following the 1975 reform. Finally, a view of what minority and poor children can expect under the more recent 1977 legislation is offered along with recommendations for achieving greater equity in future legislation.

A Socioeconomic and Political Profile of Texas

A series of demographic and economic changes following a general trend toward greater modernization since World War II make Texas one of the more interesting states politically. Since 1945, the rate of population shift from the farm to the city has been twice as rapid in Texas as in the nation as a whole.[2] By 1970, some 79.8 percent of Texas' 11.2 million residents lived in urban areas (of at least 2,500 population).[3] The change from an agri-

cultural to an industrial economy has been accompanied by an increase in the educational level of the population and the growth of a large middle-class, and has resulted in a marked change in political attitudes.

Most of the urban dwellers can be found in one of two sprawling metropolitan regions: the Houston-Galveston and Dallas-Fort Worth areas. In 1970, these two areas contained 40.2 percent of the state's total population, and if the trend continues, that figure will approach 50 percent by 1980. A third metropolitan area may also be developing, linking San Antonio and Austin.[4] The growth of metropolitan areas has meant the corresponding decline of rural areas and small towns. From 1960 to 1970, almost two-thirds of Texas counties lost population.[5] The number of children of school age in non-metropolitan areas is expected to drop dramatically -- from 750,000 in 1960 to 524,000 by 1980.[6] This population shift has important implications for the politics of school finance, since traditionally the state funding formula has been weighted in favor of rural school districts.[7]

Texas politics is also interesting because of the ethnic heterogeneity of its population. According to the 1970 census, 18.4 percent of the population is of Spanish language or surname, and another 12.5 percent is Black.[8] With increasing political participation by minorities, who constitute almost one-third of the population, ethnicity is now an important political consideration. In a state which historically has drawn its political leaders from a pool of white, middle-class Protestants, minority participation in politics brings with it considerable disruption of the political nor This process has been facilitated by the redistricting of state legislative districts according to the one man-vote rule,[9] resulting in greater representation for minority and urban communities. In

1978, 14 of the state's 151 representatives and three of the 31 senators were Mexican American. Ten representatives were Black.

Just as the Texas population is diverse ethnically, it is very stratified economically and socially, and most of these inequalities occur along ethnic lines. The 1969 median income for the total population was $8,490, somewhat less than the national average of $9,590. The median income of Blacks, however, was only $5,334, and the median income for Chicanos was $5,897.[10]

Educational attainment in Texas is also below the national norm. Texans had a median education of 11.6 years in 1970 compared to the national median of 12.1 years. Minority group members receive considerably less schooling than members of the dominant group. The median educational level for Blacks was 10.0, and for Chicanos, 7.0 years.[11]

Within this socioeconomic context can be found a political culture which has been described as both traditionalistic and individualistic in its orientation.[12] Since Reconstruction, Texans have largely been "brass collar Democrats." Within this one-party system, however, liberal and conservative factions have been at war, with the conservatives commanding the lion's share of the political power, and a paternalistic and elitist concept of government prevailing. Individualism is evident in the great importance placed upon local control and in resistance to unionization. The cultural emphasis on local autonomy has effectively blocked proposals to consolidate small school districts and attempts to levy a statewide personal income tax. As urban and ethnic minority interests press for greater influence in the legislative process, many of the traditional Texas political institutions are being challenged, and equity in funding education has become an important issue on which to wage

battle in the political arena of the legislature.

HISTORY OF TEXAS SCHOOL FINANCE

To understand current school finance policies in Texas, one must understand the historical development of public support for education and the philosophical assumptions which guided this history. The problems in reforming the Texas school finance system can be traced over the years through a review of key changes in constitutional and statutory provisions revolving around the two central issues of taxpayer equity and an equitable distribution of educational dollars.

The Early History of School Finance: Pre-1948

Very early in the history of public education in Texas, the concept of "minimum educational opportunity" was adopted[14] and continues even today in the form of a Minimum Foundation Program. The pioneers of Texas had envisioned a tax-free system of public education to be financed with revenues from lands held in the public domain. In 1839, the Congress of the Republic of Texas set aside three leagues of land in every county for the support of education.[15] By the time Texas was admitted to the Union in 1845, it was clear that the revenues from the public lands would not support an adequate school system. The Constitution of 1845 thus set forth "to establish free schools throughout the State, and . . . furnish means for their support by taxation on property."[16]

Less than a decade later, in 1854, the earlier version of today's Permanent School Fund was established as a repository for revenues from public lands. The Texas Constitution, as

rewritten in 1876, dropped the state property tax and added the proceeds from a $1 poll tax and one-fourth of all occupation taxes to the income generated by the Permanent School Fund to create the Available School Fund. The Available School Fund, which was distributed on a per-pupil basis, became the chief source of support for public schools in Texas for almost a century.[17] Thus, as of 1876, "equalization" in Texas meant equality in the strict sense of providing an equal amount of state aid for all students.

With the constitutional amendment of 1883, Texas introduced the collection of local ad valorem property taxes for the support of schools, which was to become the source of most inequalities in the funding of education.[18]

The first effort to distribute state funds in inverse proportion to the property wealth of a district came in 1915 with passage of the Rural Aid Law. Under that law, supplementary funding was available to districts with fewer than 1,500 pupils to cover a variety of educational program costs. To qualify for aid, a district was required to raise a local tax of 5 mills. The amount of revenue from the 5 mill levy, combined with the per capita apportionment from the Available School Fund, was deducted from the approved program costs, and the balance was funded by the state--to the extent that the funds appropriated were sufficient to cover costs.[19] Although equalization aid for rural districts was insignificant at the time of the passage of the law, by 1948 expenditures under that program totaled just over $24 million compared to about $84

million from the Available School Fund.[20]

Because Rural Equalization Aid excluded larger school districts, the program fanned the flames of conflict between urban and rural interest groups. While larger districts lobbied for increases in the per capita appropriations under the Available School Fund, the rural districts lobbied for larger apportionment under the Equalization Aid program. These pressures, combined with 1) post-war inflation, 2) the prospects during the next decade of burgeoning enrollments from the baby boom, and 3) legal attacks on racially segregated schools and their accompanying inequalities, led to the creation of the Gilmer-Aiken Committee in 1947. The committee was assigned the task of designing a new system of financing public education in Texas.

The Gilmer-Aiken Act of 1949

By the end of World War II, it had become apparent that the philosophy which undergirded public education was that the individual would be provided with the opportunity for intellectual growth and, in turn, the expanding industrial bureaucracy would be provided with the skilled technicians it needed for growth. Education had come to be viewed as providing the bootstraps for social mobility, the means by which one might gain access to higher occupational prestige and greater income.[21] This philosophy was reflected in the expanded programs for education and increases in state support.

However, it became increasing obvious that the state system of

of funding education was not providing for equitable support of education. By 1948-49, the per capita entitlement provided by the state had reached $101. However, the additional $85 per pupil available on the average for education throughout the state (excluding the few dollars from federal sources) was raised locally, allowing property-rich districts to "enrich" their state funding to a higher level with much less effort than the property-poor districts.

The goal of the Gilmer-Aiken Committee was to "give every school child . . . an equal minimum educational opportunity, financed by an equalized local tax effort supplemented by state aid sufficient to compensate for local taxpaying ability."[22]

On the issue of equity in raising revenue for education, the Gilmer-Aiken Committee noted that the chief prerequisite for reform was to obtain accurate estimates of the relative wealth of school districts. In their report, entitled To Have What We Must, the committee laid out a laundry list of property-value-related problems, among them:

1) School districts were deliberately understating their property values to enhance their state aid entitlements; approximately $134.8 million of assessed property values had been left off the school tax roles in 1947.
2) The measure of local taxpaying ability was badly distorted by wide discrepancies in local assessment practices.
3) There were more than 5,000 school districts in Texas, but more than half did not even operate; they existed only as tax havens.[23]

The need for establishing statewide supervision of local property-value appraisal and reporting procedures was apparent, but the committee concluded that it did not "seem feasible at present" for the state to require equalization of assessments or even state estimates of true values in each district.[24] Property tax reform was placed on the back shelf as a legislative priority.

On the issue of equity in funding education, the committee proposed a Minimum Foundation Program (MFP) which provided for a prorated matching of state and local dollars for personnel, transportation, and operating costs up to a guaranteed minimum on the basis of a set of formulas. The state would cover approximately 80 percent of the total program costs statewide and districts would pay for the remaining 20 percent from local ad valorem property taxes. The actual percentage a particular district would share in paying the MFP costs was based on an "economic index" as a measure of the district's ability to pay taxes. The economic index was a complex measure based on three different types of weighted factors: (1) assessed property valuation in the county, weighted by twenty; (2) the scholastic population of the county, weighted by eight; and (3) income for the county as measured by the value added by manufacturing, agricultural products, minerals produced, and payrolls, weighted collectively by 72.[25] The economic index was to become one of the chief targets of future reform efforts and was to be finally abandoned in the reform law of 1975.

Capital outlay costs were not included in the MFP. Physical plant construction was to be paid exclusively by local district taxes. And, of course, a district could "enrich" their educational programs through local tax levies.

Both the Minimum Foundation Program and the economic index were enacted by the Legislature in 1949. With passage of the Gilmer-Aiken bill, the state adopted the basis for its present funding formula which, through modifications over the years, is probably the most complicated in the nation. Besides relying on a series of formulas for determining a district's program costs,[26] the complicated process of allocating state and local costs under the MFP can be boiled down to the following steps:

1) Allowable program costs within all school districts were added. The sum represented the statewide total allowable MFP costs.
2) The "wealth" (as measured by the Economic Index) of all counties was added to compute the statewide total "wealth."
3) Each county's "wealth" was expressed as a percentage of the state total "wealth." A county's proportion, multiplied by the statewide allowable local share (20-25%) of the MFP costs, equaled the amount of money that county would have to raise as its share of the MFP.
4) Each district's share (or "local fund assignment") was apportioned according to that district's percent-

age of total assessed values on the county tax roll.

5) The state share of MFP costs was paid from two revenue sources: general revenue appropriations and the per capita allocation from the Available School Fund. The MFP allocation to be paid to a district from general revenues was determined in the following manner:

   a) The per capita apportionment was subtracted from the district's total allowable MFP costs. The balance represented the costs to be split between the district and the general revenue appropriations.

   b) The share to be paid by the state from general revenues was then determined by subtracting the district's local share (as computed in step 4 above) from the difference between the district's per capita apportionment (as determined in step 5a above) and the allowable MFP costs.[27]

The fact that districts were allowed to "enrich" their educational programs beyond the minimum level of the funding under the MFP through additional local tax revenues provided the basis for future inequalities. At the time of its adoption in 1949, the MFP covered about 80 percent of all educational expenditures (excluding federal monies). The remaining 20 percent was funded through local tax levies. By the beginning of the 1970's, local enrichment had increased to about 30 percent of all state and local revenues.[28] The minimally adequate funding provided by the Foundation Program became less adequate for basic educational program needs.

There were other weaknesses in the MFP which became increasingly apparent over the years. First, since the Gilmer-Aiken Act had proved to be the salvation for thousands of Texas school districts on the verge of fiscal collapse, it perpetuated "tax havens" by providing support for hundreds of districts which had very few children, inferior educational programs and low tax rates. Second, the economic index proved to be a poor measure of the relative ability of districts to raise revenues for education. The distorting features included: (1) a number of "credits" given to soften the impact of the increased taxes required under the MFP, (2) the heterogeneous nature of factors included in the basic formula (students, minerals production, agricultural income, etc.) taken from different time periods, and (3) the fact that the index gave a disproportionate weight to how taxable measures of local wealth (such as payrolls) while minimizing the weight given to taxable property. That weighting system gave cities relatively less state aid than they would have under an index based solely or primarily on property wealth. Finally, and probably most important, the minimum level of funding under the Foundation Program was not so much determined by the needs of pupils and the programs which serviced them as by the Legislature's budgetary bargaining process.[29]

By 1952, members of the State Board of Education were voicing their dissatisfaction with the economic index as a measure of local wealth. They commissioned a study of the problem by the Texas Research League, which concluded that a state-pre-

pared estimate of local property values would be a more equitable means of determining local ability to support educational costs.[30] The Legislature did not act upon that recommendation.

The Governor's Committee: 1965-1968

It was twelve years after the publication of the Texas Research League report that Governor John Connally appointed a Governor's Committee on Public Education to undertake an extensive study of the condition of public education in the state and make recommendations for "a specific long-range plan which would let Texas emerge as a national leader in public elementary and secondary education." [31] The committee operated on--or at least voiced--a philosophy that went beyond the limited notion of a minimally adequate education to embrace the concept of a "full opportunity" definition[32] of equal educational opportunity. According to the committee, each student should be helped "to develop his personal knowledge, skills and competence to the maximum of his capacity."[33]

While the committee's proposals may not have been able to provide the opportunity for maximum attainment to each child, in most instances they were more far-reaching than had yet been proposed by an officially recognized body. Some of the proposals addressing equity issues included:

1) consolidation of districts with less than 1,600 students;
2) a state-financed kindergarten program with special preference given initially to poor children and children of limited English-speaking ability;

3) an increase in the level of the Minimum Foundation Program and inclusion of all major current expenditures such that few districts would want to raise local enrichment funds above that level;

4) abandoning the Economic Index and substituting an equalized measure of the value of school district taxable property.[34]

Of these proposals, only the kindergarten program was enacted in the 1969 legislative session.

While the Legislature was not responsive to the recommendations of the Governor's Committee, the committee report, published in 1968, served the very important function of documenting the inequities which had been built into or later crept into the system of financing education. One of the more important records established by the Governor's Committee was a report prepared by Charles Bartlett which documented inequities in the Texas property tax system. Bartlett found wide-spread inaccuracies in the appraisal techniques used by Texas school tax assessors. The effect of those inaccuracies was a considerable tax advantage for certain categories of property, particularly undeveloped land, which were typically undervalued.[35]

To correct the tax inequities, Bartlett recommended that the Legislature institute a state system for documenting the sales value of all property as a measure of district property wealth, and that the state mandate professional standards and training programs for all tax assessors.[36] As indicated above, his

recommendations were ignored during the 1969 legislative session. What did pass at the expense of the recommended reforms was a ten-year plan for increases in the state salary schedule for teachers. Through the lobbying efforts of the Texas State Teachers Association, the mandated pay scale increases were advanced through the 61st Legislature at a cost which, when combined with the price of the proposed reforms, boggled the minds of the legislators and the new Governor. The feeling was that something had to be sacrificed; the reform proposals lost out.

The Rodriguez Case: 1968-1973

The impact of the mounting inequalities in educational resources was very real for parents of the Edgewood School District in San Antonio. In July, 1968, they filed suit in U.S. District Court, claiming unlawful denial of equal protection under the 14th Amendment to the Constitution.[37] The initial complaint, limited to the thirteen school districts in Bexar County, sought to force consolidation of the districts in the county as a means of alleviating the plight of Edgewood and achieving both taxpayer equity and greater equality in the funding of education.

Edgewood was a good candidate for the suit and San Antonio a classic example of the types of inequalities endemic to a system of funding which relies primarily on the local ad valorem property tax. More than 90 percent of the residents of Edgewood were of Mexican descent. The district had the lowest per capita income in the county and the lowest property wealth in

the state. While paying a higher school tax rate than most of the wealthier districts in the metropolitan area, Edgewood ISD raised only $26 per pupil in 1967-68. In contrast, the predominantly Anglo, high-income Alamo Heights School District across town had about twelve times as much taxable property per pupil as Edgewood and was raising $333 per pupil locally. The cruel irony pointed out by the plaintiffs was that under the Foundation School Program, Alamo Heights was receiving approximately the same amount of state aid per pupil as Edgewood.[38]

The implications of the suit soon reached beyond the San Antonio area. Consolidation of districts within Bexar County was no longer the remedy sought; instead, the suit challenged the constitutionality of the entire system of funding education in the state. Attorneys for the plaintiffs fashioned their pleadings after the Serrano case (1969) in California as a fiscal neutrality suit and added the claim that poor and minority children were discriminated against in the system of funding education.[39]

The final judgment by the District Court was postponed to give the 62nd Legislature (1971) a chance to pass the much-needed reforms in the state system of funding education. After the Legislature failed to enact any changes, the plaintiffs' attorneys pressed for a decision on the case. On December 23, 1971, a three-judge panel of the U.S. District Court, Western District of Texas, found that indeed the system of funding education in Texas did "discriminate on the basis of wealth"

and ordered a restructuring of the public school finance system "in a manner that does not violate the equal protection provisions of the U.S. and Texas constitutions."[40] The order was stayed, however, for two years to allow the defendants a chance to develop and enact legislative reforms suitable to the court.[41]

In response to the District Court's ruling, about a dozen different groups initiated interim studies to develop reform proposals. Of these, three groups with political clout presented proposals that actually made it into the serious debates of the next Legislature: the State Board of Education, the Texas State Teachers Association, and the Joint Senate Interim Committee.[42] It is significant that all three groups recommended abandoning the economic index and adopting a state-equalized true market value approach to determining district ability to pay. All three plans also included substantial increases in the level of funding under the Foundation program, but none advocated a complete restructuring of the program.[43] The last of the three plans was delivered officially on March 20, 1973, one day before the U.S. Supreme Court reversed the lower court's decision in the Rodriguez case, declaring that the system of financing education in Texas was not in violation of the U.S. Constitution.[44]

But the plaintiffs in the Rodriguez case were not easily discouraged in their determination to challenge the inequities in the school finance system. On May 2, 1973, a few thousand parents and children, most of them Chicanos, rallied outside

the Capitol in Austin under the name of the People's Lobby for Equal Education (PLEE). They called upon the Governor to make a commitment to throw his support behind legislative reform. Before the crowd, the Governor promised he would provide relief for poor districts. It soon became clear, however, that his "relief" involved only $46 million in new state funds.[45] PLEE leaders were furious, as were those legislators working for a complete overhaul of the school finance system.[46] A compromise, spawned in the House under the leadership of Representative Dan Kubiac, was pitted against the Governor's proposal. Neither proposal passed and the Texas Legislature went through another biennial session with much heated debate, but no school finance reform.

The Supreme Court's refusal to provide protection to poor school districts under the 14th Amendment was a terrible blow to the reform movement nationwide and effectively precluded fiscal neutrality litigation in federal court. But, although it was lost, the Rodriquez case performed the very important function of raising public awareness of the fact that wealth discrimination of the sort described by the plaintiffs could be found in almost every state system of school finance in the nation and that discrimination would have to be dealt with state-by-state. "Fiscal neutrality" had not lost; the Supreme Court simply returned the responsibility for equitable education finance to the states. Although the court order was no longer pressing the Texas Legislature, the ethic of "no wealth discrimination" was firmly established as one normative measure

to be applied by reformers to test future legislative proposals.

Post-Rodriquez Reform Efforts: 1973-1975

It was back to the drawing board for the Governor and the Legislature. Governor Briscoe created the Office of Educational Research and Planning, which set to work on a rather lengthy research agenda, but with the harness of the Governor's promise for no new taxes. Other study groups also began developing plans for the 1975 session. In addition, the Governor asked the Legislative Property Tax Committee (LPTC) to conduct a study of the full market value of taxable property for each of the state's more than 1,100 school districts. Realizing the enormity of the task in terms of the time and money needed to produce valid estimates of full market value in each district, the LPTC settled on a pilot study of property values in a sample of 35 school districts.

Like the Bartlett study of a decade earlier, the LPTC study found that local property appraisal practices were, by and large large, substandard. While admittedly only limited statewide generalizations could be accurately made from the small sample, the LPTC found the 35 districts studied were undervaluing on the average at 40 percent of true market value, ranging from a low of 19 percent to a hign of 89 percent. The greatest degree of undervaluation was found in small, rural districts of relatively high property wealth. The LPTC also found considerable variation in the valuation of various types of property: rural and industrial property, with the greatest tax advantage, were un-

dervalued by about 61 percent and 41 percent, respectively; single-family residential property, by about 29 percent; local commercial property, by about 23 percent. The study also noted that within all categories of property, the degree of undervaluation tended to increase as the value of property increased. For example, $20,000 homes were undervalued by about 20 percent; $100,000 homes, by about 50 percent.[47]

The findings of the Legislative Property Tax Committee study confirmed with painstaking detail what those who were in touch with Texas property valuation already knew: the property values reported to the state by local tax assessors were very poor reflections of the actual value of property, and appraisal methods were far from uniform across the state.

With only months left before the next legislative session, the Governor's Office engaged the services of an Austin consulting firm, Management Services Associates (MSA), to develop estimates of district property values statewide. Various school finance study groups agreed on the need for a single estimate of local property values for inclusion in their legislative proposals. The MSA estimates were selected as the "official" values.[48] Although many questions were raised about the validity of the MSA value estimates, most agreed that they would be a considerable improvement over the archaic economic index and that property tax reform might be dealt with in separate legislation. While the MSA market values were enacted into law during the 1975 legislative session, the property tax reform bill went down in defeat. Instead, the Legislature

appropriated $5 million to the Governor for a statewide study of local property values.

As in the previous session, several "reform measures" were offered. Chief among them were those drafted by the House and Senate Education Committees, the Governor's Office of Educational Research and Planning and the Texas State Teacher's Association.

The Governor's bill offered a weighted pupil approach to distributing state aid in some respects similar to that developed by the National Education Finance Project. But uncertainty about the effects of adopting a new concept in distributing aid, coupled with the pressures for a simple across-the board increase in teacher salaries, led to rejection of the Governor's proposal.

Toward the end of the session, as the lines began to be drawn, some of the members of the liberal Chicano Legislative Caucus saw the main contending bills as not substantially addressing the issue of fiscal neutrality raised in Rodriguez. A reform bill was drafted and introduced by Rep. Carlos Truan of Corpus Christi. The "equalization bill" while it was supported by testimony of several school finance reform academicians, did not receive widespread support from either lobby groups or other legislators. The teachers continued to lobby vociferously for increased salaries with a call for a statewide minimum of $10,000, about a 50 percent increase over the then current minimum of $6,600. An estimated 6,000 teachers gathered in Longhorn Stadium near the Capitol in a show of strength and support for the increase.

In the absence of any coalition of forces around the concept of "no wealth discrimination," the 64th Legislature passed a bill in the eleventh hour which many school finance experts felt did not adequately address the issue raised in the Rodriguez case; others felt that the changes passed were important steps in the direction of equalization. What follows is a more detailed assessment of the reform legislation.

THE 1975 REFORM -- HB 1126

When the 64th Texas Legislature convened, the state was in the enviable position of having more than $1.5 billion in surplus funds in the treasury: the opportunity to achieve greater equalization was almost unique among the states. When the session ended and HB 1126 was enacted, the level of foundation support had been raised substantially, but the basic structure of the Foundation program had not been altered. Observers of school finance reform efforts drew the analogy between the 64th Legislature and the month of March: "It came in like a lion and went out like a lamb."[49] The changes brought about by the reform can be divided into two parts: those involving changes in the level of funding and those involving changes in the distribution system.

Changes in Level of Funding

The data on Table 1 show the major areas of Foundation School Program funding increases for the first operational year of HB 1126. Some $653 million of new state dollars were added to the Foundation program over the biennium.

TABLE 1

GROWTH OF FOUNDATION SCHOOL PROGRAM
(LOCAL+STATE) COST ELEMENTS
1974-75 TO 1975-76
(in millions)

Major Programs[50]	Before HB 1126 (1974-75)	After HB 1126 (1975-76)	Increase (1974-75 to 1975-76)
Regular Program			
Salaries	1,066.4	1,319.5	253.1
Maintenance and Operation	66.5	228.5	162.0
Transportation	28.7	47.6	18.9
Special Education	179.5	218.3	38.8
Vocational Education	92.4	107.0	14.6

Teacher Salaries. Predictably, most of the increase in the Foundation program went into teacher salaries. The Legislature voted an "across-the-board" increase in salaries of $1,400 per year for personnel at or above the level of the beginning teacher with a bachelor's degree, bringing the state-mandated minimum salary for entry-level teachers to $8,000 a year. Personnel below that level received half of the $1,400 "across-the-board" increase.[51]

Maintenance and Operation. The next largest increase was in Maintenance and Operation (M&O). In the year prior to the reform (1974-75), districts were spending an average of $175 per pupil, and the state, $35 per pupil. Under the new law, Foundation program allowance costs for maintenance and operations increased to $85 per pupil in 1975-76 and $90 in 1976-77, at a total cost to the state of about $297 million new dollars over the biennium. This represents a $162 million increase in the level of state spending for M&O.[52]

Pupil-Targeted Funds. Approximately one-fifth of all revenues in the Foundation School Program under HB 1126 were earmarked for pupil-targeted programs. Half of these pupil-targeted funds were for special education and slightly more than one-fourth were for vocational education. Kindergarten accounted for an additional 15 percent. The remaining eight percent were allocated for compensatory education, bilingual education and driver education.[53]

The principle of providing extra financial assistance to school districts with large concentrations of "educationally disadvantaged" pupils was introduced for the first time into the state funding system with HB 1126. An additional $40 for each eligible Title I pupil was added to the Foundation program cost allowance of each school district. Appropriations for compensatory education funding totaled $25.4 million per year.

Bilingual education aid was provided by the state for the first time in 1973. Although state appropriations amounted to $6.2 million in 1975-76, actual expenditures for that program year totaled only about $4.7 million. Bilingual education funding by the state was extended to kindergarten and through the third grade, where programs are mandatory for districts with 20 or more children of limited English-speaking ability in the same grade level. Optional funding was made available for the fourth and fifth grades, but for grades six and higher, the entire expense for bilingual education was left to the local districts, with no support under the Foundation School Program.

Beyond the increases in state aid under the Foundation program, which resulted in some leveling up, equalization measures amounted to very little.

State Equalization Aid. State "enrichment equalization" aid was the aspect of the new law designed to give property-poor districts some compensation for the inability to raise local enrichment funds because of their limited tax bases. It was to be Texas' answer to wealth discrimination. In the final analysis it proved to be a disappointment, spreading few dollars very widely. The law set aside $50 million annually to be distributed among districts of less than 1.25 of the state average property valuation per pupil according to a formula based on a district's relative wealth.[54]

The state equalization aid had three crippling restrictions: (1) the guaranteed state aid could not exceed $70 per pupil; (2) districts were required to raise local matching funds above their local fund assignments to make up the difference between the state equalization aid and the $70 per pupil maximum; and (3) if the total cost of the equalization aid program statewide exceeded the amount appropriated, the guaranteed aid would be reduced proportionately in each district until the total amount of funds required equaled $50 million. After the bill was passed, the estimated cost of equalization aid at $70 per pupil maximum exceeded the $50 million appropriated by $11.5 million during 1975-76, and the maximum aid any district could receive was reduced to $57 per pupil. Districts qualifying for equalization received only $23 per pupil on the average from the state for the first year of the program.[55]

Sparse Area Funds. Districts of at least 300 square miles of territory with not more than 1,000 students in average daily attendance were granted additional funds according to a sparcity index in the new law. While the total funding amounted to less than $5.4 million, this measure may have served to discourage consolidation of very small districts and thus had the potential for becoming a disequalizing factor.[56]

Changes in the Basic State Aid Formula

Assignment of Regular Program Personnel. While the "weighted pupil approach" to funding had been rejected by the legislature in its pure form, many saw the provisions of HB 1126 as somewhat of a compromise between pupil weightings and the traditional "classroom teacher/unit approach" which had been used for decades under the Foundation program. The "weighted personnel approach" under the new law assigned personnel units differently on the basis of the school district's average daily attendance (ADA) at each grade level category in the regular program, as illustrated below:[57]

Grade Level	ADA Required to Earn 1 Personnel Unit
K - 3	19
4 - 6	21
7 - 9	20
10 - 12	18

Current school year's ADA was adopted in lieu of the former option of utilizing the past year's ADA. The allocation formula is not representative of class size, since personnel other than teachers are included. The new law specifically stated

that there was to be no less than one teacher for every 25 pupils in ADA. The new allocation formula also provided state funds for personnel not previously included in the Foundation program and who had been supported exclusively by local funds. Such expansion of the Foundation program led to some "leveling up" which benefitted the poorest districts.

Adoption of a Single-Factor Index of Wealth. What has been touted as the most significant equalizing feature of HB 1126 was the scrapping of the outmoded and complex Economic Index and the adoption of a single-factor index of full market value of property in determining a district's contribution to the Foundation program. HB 1126 stipulated that for 1975-76, a district's local share would be $.30 per $100 of MSA estimated local property values. For the 1976-77 year, the local share was to be computed at the rate of $.35 per $100 of the MSA estimated values. The match rate on local sharing (which a district was not actually required to raise), was designed to bring substantial amounts of what had been local enrichment dollars under the umbrella of the Foundation program. Indeed, during the first year following enactment, the amount of local enrichment as a percentage of total local and state expenditures declined from 32 percent to 21 percent. But no limit was placed on the amount of local enrichment a district was allowed to raise, a shortcoming which was to exacerbate inequalities.

With the new single-factor index of market values, the

procedure for determining state and local shares of the Foundation program costs was simplified considerably:

1. All of a district's allowable program costs for salaries, transportation, and maintenance and operation costs are totaled.
2. The district's local share of program costs is subtracted from total allowable costs. The balance represents costs to be funded by the state.
3. The district's per capita allocation from the Available School Fund is subtracted from the total amount to be funded from state revenues. The balance is paid by the state from general revenues. If the per capita exceeds the district's state aid entitlement, the district still receives the total amount of the per capita allotment.

Problems Contributing to Inequities

Four features of HB 1126 continued to perpetuate inequities in the school finance system. The first was the inaccuracy of MSA estimates of school district property values. Absent a valid value base from which to equalize, the method of distributing state aid "according to local need" was distorted by the inaccuracies built into the estimates of local property values.

A second problem is that of continued inequities due to differing ability to raise local enrichment revenues. Despite the additional new state revenues, the state does not provide enough aid through the Foundation program to cover the basic

costs of education. Districts continued to enrich their programs on the average about twenty-five percent above the foundation level after the 1975 reform.

A third problem is almost as old as the state itself. The state continues to distribute more than one-third of its state aid on a flat per capita basis. Revenue yields from oil and gas severance taxes have swelled the coffers of the Available School Fund in recent years. During the 1972-73 school year, the per capita allotment from the Available School Fund was $130 per pupil;[58] in 1976-77, it amounted to approximately $220 per pupil; and the estimated per pupil allocations for 1977-78 and 1978-79 are $240 and $258, respectively.[59] Per capita aid came to about $553 million or about 35 percent of all state aid during 1976-77. For a system that allows unlimited local enrichment, distributing such a large proportion of state aid on a per capita basis without regard to the local ability to raise educational revenues, is a disequalizing feature of the law.

Finally, hold-harmless provisions in the 1975 law continued disequalizing allocations of state aid to wealthy school districts.[60] Every district was guaranteed at least 104 percent of the state aid it received during the year prior to the reform law.[61] Furthermore, no district's local fund assignment could increase more than 100 percent in 1975-76, nor more than 150 percent in the 1976-77.[62] Moreover, a district with fewer than 1,000 students in ADA could receive no fewer professional personnel units for its regular educational program than it received in 1974-75.[63]

With the history of school finance reform efforts as a backdrop and the details of the 1975 reform in mind, we turn now to the empirical research problem of assessing the impact of the reform on minority and poor students in Texas public schools.

The Research Questions

Preliminary to answering the central research question concerning changes in the distribution of educational revenue among ethnic and income groups as a result of the reform, four empirical questions must be addressed:

1) To what extent do inequalities in the distribution of educational revenue exist prior to and after the reform?

2) To what extent does the level of revenue available for education relate to district wealth before and after the reform?

3) To what extent are ethnic and income groups isolated by school district boundaries?

4) What is the relationship between ethnicity/poverty and district property wealth ?

Once a clear picture of the inequalities in revenue and the distribution of ethnic and income groups is obtained, the questions of major concern in this study are as follows:

5) What disparities exist both before and after the reform among the major ethnic and income groups in average educational revenue from local, state and federal sources?

6) To what extent are differences in educational revenue related to ethnic and income composition of school districts before and after the reform was passed?

7) How can we account for the differences in educational revenue available to different ethnic and income groups and to districts of different ethnic composition?

Each of these seven questions will be addressed in the

sections which follow.

EMPIRICAL RESULTS

Statewide Fiscal Inequalities

Table 2 presents descriptive summary statistics on school district fiscal and pupil characteristics. Table 3 presents four equality measures on the same school finance variables. One immediately obvious fact is the wide range in values for each of the measures. This is due in part to the large number of school districts in Texas, many of which are very small. School district wealth in 1974 varied from a low of $7,293 per pupil in Edgewood school district in San Antonio to a high of $46,657,280 per pupil in Provident City school district in Wharton County, for a ratio of 6,398:1.

Equalized tax rates vary from .33 mills on MSA market values to 20.39 mills, with an average of 8.98 mills. One of the most important goals of school finance reformers has been taxpayer equity. As can be seen from comparing the coefficients of variation before and after the reform in Texas, however, the large disparities in tax effort were not reduced much at all. If one examines the ratios of assessed tax market values, another method by which inequities have crept into the system of property taxation can be seen. In 1974, one district was assessing property as low as 4 percent of the MSA market value, another as high as 128 percent of the MSA market value estimate, with a state average of 54 percent.

One result of the law was to produce a new set of market

TABLE 2

SUMMARY STATISTICS ON TEXAS SCHOOL FINANCE DATA 1974-5 & 1975-6

Variable	Before Reform (1974-75)	After Reform (1975-76)	Percent Change in Mean
Market Value Per ADA	(MSA Values)	(GOER Values)	
Mean	63,373	93,519	+47.5%
Median	50,547	75,739	
Standard Deviation	80,444	99,657	
Minimum	7,293	11,926	
Maximum	46,657,277	16,859,070	
Tax Rate on MSA Values (mills)			
Mean	8.98	10.06	+12.0%
Median	9.23	10.23	
Standard Deviation	2.31	2.50	
Minimum	.33	.40	
Maximum	20.39	23.27	
Local Revenue Per ADA			
Mean	529	596	+12.7%
Median	486	541	
Standard Deviation	282	339	
Minimum	23	75	
Maximum	25,333	67,249	
All State Revenue Per ADA			
Mean	501	636	+26.9%
Median	507	641	
Standard Deviation	116	139	
Minimum	0	0	
Maximum	3,891	2,536	
Local + State Revenue Per ADA			
Mean	1,029	1,232	+19.7%
Median	1,024	1,201	
Standard Deviation	252	277	
Minimum	413	597	
Maximum	25,577	67,785	
Federal Revenue Per ADA			
Mean	75	96	+28.0%
Median	67	77	
Standard Deviation	74	88	
Minimum	0	0	
Maximum	1,584	1,133	
Total Revenue Per ADA *	1,195	1,444	20.8%
Mean	1,098	1,362	
Median	382	459	
Standard Deviation	416	642	
Minimum	25,577	67,785	
Maximum			

*Includes "non-revenue receipts" from sale of bonds, loans, sale of lands, buildings and equipment, net insurance recovery, etc., not included in local, state or federal revenues above.

Variable	Before Reform (1974-75)	After Reform (1975-76)	Percent Change in Mean
State Foundation Aid Per ADA			
Mean	473	606	+28.1%
Median	476	610	
Standard Deviation	108	131	
Minimum	0	0	
Maximum	3,887	2,129	
Local Enrichment Per ADA			
Mean	285	278	- 2.4%
Median	264	248	
Standard Deviation	163	177	
Minimum	0	0	
Maximum	12,494	40,902	
Instructional Expend. Per ADA			
Mean	602	745	+23.8%
Median	592	740	
Standard Deviation	107	122	
Minimum	273	315	
Maximum	10,635	22,851	
Capital Expenditures Per ADA			
Mean	154	187	+21.4%
Median	71	110	
Standard Deviation	218	243	
Minimum	0	0	
Maximum	12,099	3,475	
Current Oper. Expend. Per ADA			
Mean	926	1,150	+24.2%
Median	904	1,124	
Standard Deviation	189	216	
Minimum	366	529	
Maximum	21,855	35,575	
Total Expenditures Per ADA			
Mean	1,189	1,452	+22.1%
Median	1,116	1,407	
Standard Deviation	335	362	
Minimum	394	620	
Maximum	21,947	35,580	
Percent Chicanos Enrolled			
Mean	23.9	24.3	+ 1.7%
Median	13.4	13.5	
Standard Deviation	26.4	26.8	
Minimum	0.0	0.0	
Maximum	100.0	100.0	
Percent Blacks Enrolled			
Mean	15.2	15.2	0.0%
Median	7.1	6.9	
Standard Deviation	16.9	17.1	
Minimum	0.0	0.0	
Maximum	86.7	87.2	

value estimates (entitled "GOER values" in Table 2). The new (GOER) estimates for 1975 were 47.5 percent higher on the average than the 1974 MSA estimates. Such an increase, however, must be viewed more as an artifact of the methodology employed in obtaining the value estimates than as an actual increase in property valuations. According to the GOER value estimates, districts were assessing on the average at 42 percent of full market value in 1975, ranging from a low of 3 percent to a high of 87 percent.

Another interesting observation that can be made from Table 2 is that all fiscal measures except local enrichment show considerable increases in the first year following the reform. The average local enrichment (excluding capital improvements) decreased by 2.4 percent in the wake of the 1974 reform. This is commensurate with one of the goals of HB 1126, to bring much of what was then local enrichment revenue under the umbrella of the Foundation program by increasing both the local share of the program and the basic foundation level. The decrease in local enrichment dollars, however, was very slight, and the overall degree in inequality in enrichment increased after the reform. If one examines the coefficients of variation in Table 3, it is evident that both local revenue and local enrichment revenue became more unequal following the reform. This is to be expected since the reform contained no effective provision for limiting either expenditure level or tax rate. While the laws both before and after 1975 specify a maximum of 15 mills which a district can levy on assessed valuations for general operating funds, the ratio at which a district assesses its property can be changed to accommodate almost any tax rate, thus rendering any limits on tax

TABLE 3

EQUALITY MEASURES ON SCHOOL FINANCE MEASURES FOR TEXAS SCHOOL DISTRICTS: 1974-75 AND 1975-76

School Finance Measures		Range	Restricted Range	Fed. Range Ratio	Coefficient of Variation
MSA Value**	1974-75	46,649,987	115,548	6.52	126.9
GOER Value**	1975-76	16,847,146	182,023	6.40	106.5
Total Tax (Per	1974-75	2.06	.79	1.68	25.9
$100 MSA Val.)	1975-76	2.31	.84	1.56	25.0
Total Tax (Per	1974-75	1.16	.67	2.91	36.1
$100 GOER Val.)	1975-76	1.24	.73	2.61	32.0
Local Revenue	1974-75	25,310	800	4.23	53.3
Per ADA	1975-76	67,174	915	4.69	56.8
State Revenue	1974-75	3,891	298	.83	23.2
Per ADA	1975-76	2,536	368	.79	21.8
Local and State	1974-75	25,164	739	1.09	24.5
Revenue/ADA	1975-76	67,188	777	.89	22.5
Federal Revenue	1974-75	1,584	206	34.33	98.4
Per ADA	1975-76	1,133	239	39.83	91.6
Total Revenue	1974-75	25,161	1,006	1.20	31.9
Per ADA	1975-76	67,143	1,132	1.06	31.8
State Found.	1974-75	3,887	272	.80	22.9
Aid Per ADA	1975-76	2,129	352	.81	21.6
Local Enrich.	1974-75	12,494	494	6.68	57.4
Per ADA	1975-76	40,902	505	11.74	63.7
Instr. Expend.	1974-75	10,362	295	.62	17.8
Per ADA	1975-76	22,536	352	.59	16.3
Current Oper.	1974-75	21,488	521	.76	20.4
Exp. Per ADA	1975-76	35,045	630	.74	18.8
Expend. for	1974-75	12,099	536	28.21	14.1
Cap. Outlay	1975-76	3,475	629	22.46	13.0
Total Expend.	1974-75	21,552	1,013	1.20	28.1
Per ADA	1975-76	34,960	1,056	.99	24.9

rates almost meaningless.

There was no appreciable change in the degree of inequality in total revenue from all sources following the reform. However, there was a small but noticeable decrease in the degree of inequality in state plus local revenue, made possible by the somewhat equalizing effects of both state and federal revenue. The effects of state and federal revenue will be discussed in a later section of this report.

By far the greatest inequalities were found in district property wealth and capital expenditures. The large degree of inequality in capital outlay is understandable for two reasons. First, such expenditures are exclusively from revenue raised locally with no state aid to compensate for a district's inability to raise additional revenue above the Foundation program level. Secondly, the large variation in district enrollments is accompanied by large differences in physical plants. The problem of diseconomies of scale is particularly salient when dealing with brick and mortar expenditures.

District Wealth Disparities. Inequalities in property wealth among Texas' 1,090 school districts during 1974 and 1975 can be scrutinized in Table 4. Estimates of full market value of taxable property per pupil in ADA are presented. The MSA estimates were derived chiefly from a survey, conducted by Management Services Associates (MSA) of Austin, Texas, of all school districts in Texas for the 1974 tax year. These data became the basis for funding education under HB 1126 for the 1975-77 biennium. The second set of estimates were prepared by the Governor's Office of Educational Resources (GOER) on the 1975 tax year, and became the

TABLE 4

DISTRIBUTION OF TWO MEASURES OF DISTRICT WEALTH AMONG TEXAS SCHOOL DISTRICTS, 1974 AND 1975

Equalized Property Valuation Per ADA	MSA Estimates, 1974			GOER Estimates, 1975		
	Districts	Pupils	Cumulative %	Districts	Pupils	Cumulative %
$10,000 or less	3	3,340	0%*	0	0	0%
10,000- 14,999	12	80,867	3	1	17,526	1
15,000- 19,999	16	71,474	6	3	9,720	1
20,000- 24,999	38	92,826	10	7	32,211	2
25,000- 29,999	52	249,774	20	9	82,486	5
30,000- 34,999	57	141,929	25	5	33,793	6
35,000- 39,999	68	106,043	30	10	35,926	8
40,000- 44,999	75	221,534	38	20	179,835	16
45,000- 49,999	62	284,053	49	14	85,831	18
50,000- 54,999	59	208,248	58	20	135,304	24
55,000- 59,999	41	163,310	64	35	146,096	30
60,000- 64,999	45	71,993	67	40	183,316	37
65,000- 69,999	39	219,525	76	39	194,968	44
70,000- 74,999	43	52,339	78	34	127,783	50
75,000- 79,999	38	198,249	86	33	99,553	53
80,000- 84,999	30	49,053	87	34	64,329	56
85,000- 89,999	17	33,233	89	30	130,328	61
90,000- 94,999	23	11,213	89	28	28,831	62
95,000- 99,999	29	47,244	91	38	222,459	71
100,000-109,999	36	36,797	93	74	296,798	83
110,000-119,999	28	36,788	94	49	50,528	85
120,000-129,999	26	18,176	95	43	62,299	87
130,000-139,999	29	30,942	96	42	59,912	90
140,000-149,999	18	9,044	96	33	29,351	91
150,000-174,999	43	21,647	97	75	73,333	94
175,000-199,999	28	14,714	98	50	24,299	95
200,000-224,999	21	14,752	98	45	27,746	96
225,000-249,999	16	5,472	99	33	16,086	96
250,000-299,999	21	12,402	99	42	17,795	97
300,000-399,999	21	6,056	99	74	26,394	99
400,000-499,999	13	4,579	99	26	7,799	99
500,000-599,999	10	3,878	99	18	7,143	99
600,000-699,999	8	1,297	100	9	921	99
700,000-799,999	4	3,643	100	11	7,004	100
800,000-899,999	2	1,936	100	5	1,094	100
900,000-999,999	3	1,306	100	5	617	100
$1,000,000 or more	23	2,588	100	37	4,855	100
Totals	1090	2,531,541		1090		
Mean MV/ADA	$63,372			$93,515		
Median (Pupils)	$50,547			$75,738		
Standard Deviation	$80,407			$99,612		

*Numbers are rounded to the nearest percentage point.

values which -- after appeals were heard and amendments made -- were built into the 1977 school funding legislation.

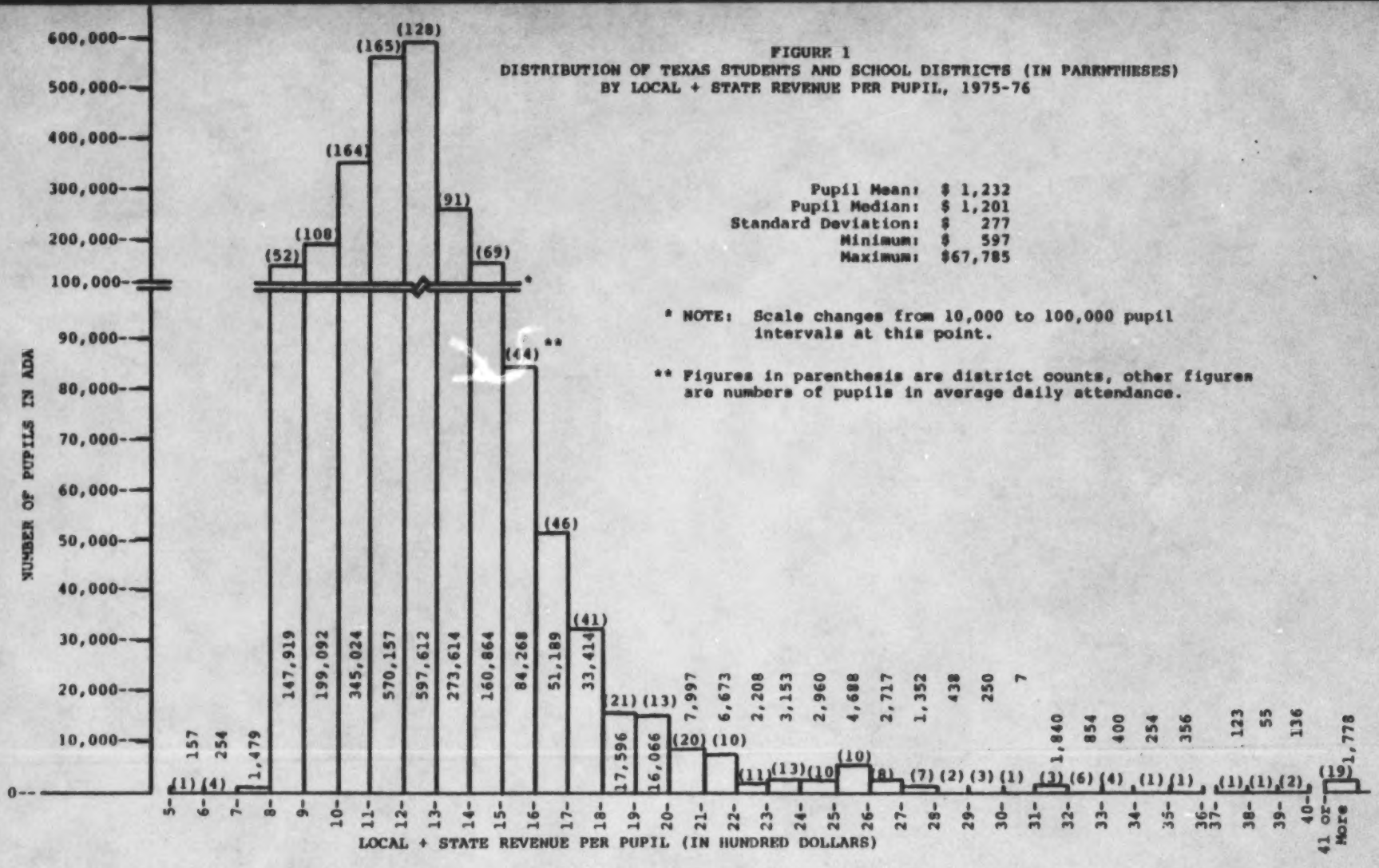
Note particularly the skewed nature of both distributions and the extreme values at the upper tails, which affect the means considerably. While the median pupil value for MSA estimates is $50,547, the mean is much higher, $63,372. Note also that while most of the pupils are concentrated in the lower end of the distribution, districts are spread out more evenly, indicating that very small districts tend to have higher values in district wealth per pupil.

Finally, there is a notable difference in the two sets of estimates of full market value. The 1975 GOER estimates are approximately 48 percent higher on the average than the 1974 MSA estimates. This dramatic increase is not all due to actual increases in the value of property, but rather to the different methodologies used in collecting and manipulating the values.[64] However, differences between the two sets of market value estimates are chiefly in terms of relative magnitude rather than in rank-orderings of the districts, as indicated by the Pearson correlation of .85 between the two measures. Since the 1975 reform was based on MSA values, these will be used as estimates of district wealth in the analyses which follow; occasionally, both value estimates will be presented for comparison purposes.

Revenue Disparities. According to one rather simplistic definition, equity in school finance has been achieved when a state system has effectively decreased the degree of inequality in the amount of revenue available for each child's education.

That definition has been amended by many experts to read: equity in school finance has been achieved when a state system has effectively eliminated the unjustifiable degree of inequality in the amount of revenue available for each child's education. Just what degree and rationales for inequality are justifiable have not adequately been spelled out by policymakers; cost of education factors, pupil needs, and non-educational tax burdens are variables which have been suggested for possible inclusion in the state equalization formulas. Realizing that there are justifications for variations in expenditures, the inequality in the amount of revenue per pupil available for education can be examined in Figure 1. What this frequency histogram shows is a distribution of Texas pupils (and districts in parentheses) by local plus state revenue per pupil. The variation is indeed great, more than the "permissible" variance one would expect from justifiable factors. Districts range from a low of $413 per pupil to a high of $25,577 per pupil, a ratio of 62:1. The extremes, however, do not adequately describe the distribution. Approximately 97 percent of all pupils are in districts which range from $800 to $1,800 per pupil in local plus state revenue for education. Like the distribution of district wealth, the distribution of revenues is positively skewed; as many as 167 districts, containing only 3 percent of the pupils, have more than $1,800 per pupil available in local plus state revenue for education. Some of these very small rural districts are presumably tax havens which do not provide the quality of educational services that their high expenditure levels might imply. A closer look at

FIGURE 1
DISTRIBUTION OF TEXAS STUDENTS AND SCHOOL DISTRICTS (IN PARENTHESES)
BY LOCAL + STATE REVENUE PER PUPIL, 1975-76



Pupil Mean:	$ 1,232
Pupil Median:	$ 1,201
Standard Deviation:	$ 277
Minimum:	$ 597
Maximum:	$67,785

* NOTE: Scale changes from 10,000 to 100,000 pupil intervals at this point.

** Figures in parenthesis are district counts, other figures are numbers of pupils in average daily attendance.

district size as a variable to be considered in examining the fiscal inequalities is warranted.

Fiscal Inequalities and District Size. The literature on inequalities in education has long recognized that the proliferation of numerous small and fiscally autonomous school systems has been a major factor contributing to fiscal inequity. Summarizing the empirical research on this topic, Harrison points out that "reductions in the number of school systems, and increases in the scope of school systems, can reduce fiscal imbalance and inequality."[65] In states with many small school systems, there is greater inequality in the distribution of wealth and in fiscal burden, as poor school districts must try much harder to compensate for their limited resources.[66] Indeed, it is the poor school district, with high tax rates and low fiscal achievement, which benefits most from consolidation.[67] But, perhaps because of concern for local control, consolidation has been avoided as a reform strategy in the recent public school finance movement. Instead, strictly fiscal solutions for fiscal problems have been stressed by the advocates of reform, ignoring the important role that administrative restructuring might play in achieving fiscal balance. Such organizational change might prove to be a particularly effective reform strategy at a time of economic recession when state governments are faced with increasing constraints.[68]

The potential advantages of consolidation for achieving equity in school finance are probably greater in Texas than any other state. Indeed, Texas has more school districts than any other state except Nebraska. Many are sparsely settled tax havens for rural ranch and oil lands. The map of Texas school districts in

Figure 2 graphically illustrates the problem of inequality created by sheer numbers of districts of varying sizes. Of the 1,090 school districts which collected local taxes in 1975-76, half had less than 572 students in average daily attendance; as many as 106 districts had less than 100 pupils in ADA.

A comparison of fiscal and demographic characteristics by district size is presented in Table 5. At first glance, the very small school districts seem to have a definite advantage over the more populous ones. However, when one takes into consideration the dis-economies of scale involved and the statistical aberration of the mean caused by extreme values in "outlier districts," the disparities are attenuated somewhat. The smaller districts are characterized by higher wealth per pupil, lower tax effort, and higher local yield per pupil. State aid, however, is not denied small districts with large amounts of local revenue per pupil and high wealth. Small school, sparcity and hold-harmless provisions in the law have insured that smaller districts receive about the same total state aid as larger districts.

As can be seen in Table 5, Chicano and Black pupils are disproportionately underrepresented in the smaller districts. Family income is higher in larger districts, as might be expected when comparing rural and non-rural income figures.

The extremely large means for districts of less than 100 pupils raises a methodological caveat which must be considered in conducting analyses on Texas school finance data. Since means are sensitive to extreme values and very small districts are apt to have very large per pupil values, district means would be inflated

FIGURE 2. MAP OF TEXAS SCHOOL DISTRICTS

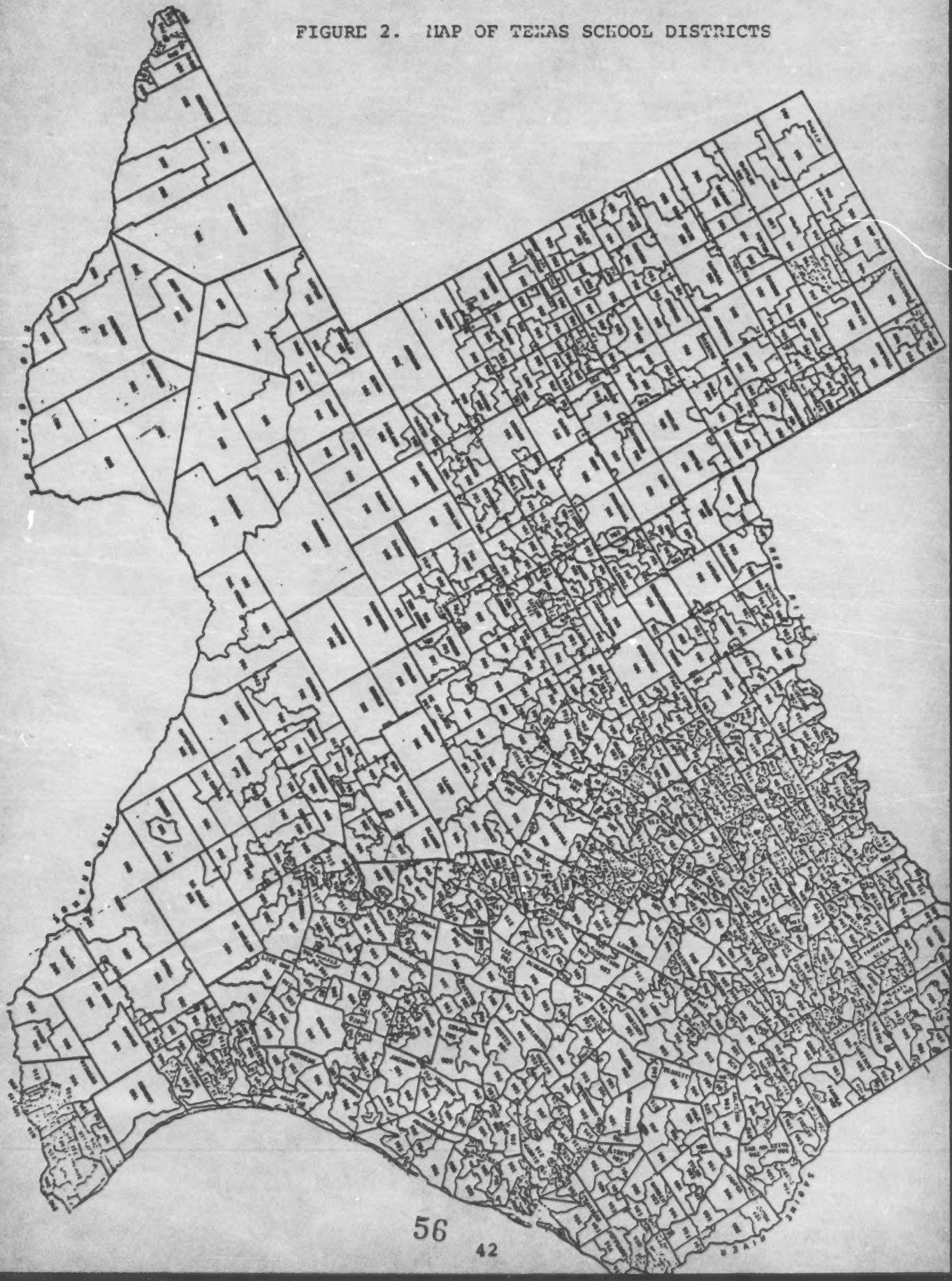


TABLE 5

FISCAL AND DEMOGRAPHIC CHARACTERISTICS OF TEXAS SCHOOL DISTRICTS BY SIZE OF DISTRICT IN AVERAGE DAILY ATTENDANCE, 1975-76

District Size in ADA	GOER Valuation Per Pupil 1975	Effective Tax Rate (mills)	Local Revenue Per Pupil 1975-76	State Revenue Per Pupil 1975-76	Mean Family Income 1970	Percent Chicano Enrolled 1975-76	Percent Black Enrolled 1975-76	No. of Districts
State Average	$93,527	68.2	$ 596	$ 636	$ 9,927	24.3%	15.1%	1,090
1 - 100	565,849	26.1	1,410	641	*	14.6	5.9	106
101 - 300	261,939	33.9	877	671	*	17.8	6.8	201
301 - 500	195,173	34.3	645	685	7,116	18.2	11.3	160
501-1,000	152,314	44.1	655	640	7,633	17.8	11.5	207
1,000 or more	82,445	71.4	583	634	10,141	25.0	15.7	416

*Census data on family income were not available for districts of less than 300 pupils.

tremendously by these small outlier districts. Instead of giving each district an equal weight in our computations, the means were weighted by district size (ADA) and thus might be referred to as "pupil means."[69] Such a procedure is believed to be entirely appropriate for this research since our concern is with the impact of school finance reform on pupil groupings and not with district behavior per se.

Wealth Discrimination

Two conceptualizations of wealth or fiscal neutrality dominate the literature on school finance -- simple neutrality and conditional neutrality.[70] The notion of simple fiscal neutrality is essentially that if inequalities exist in spending among school districts, they are not related to the district wealth. This concept of wealth neutrality can be measured by simply comparing the distribution of district wealth as it covaries with the distribution of educational expenditures.

Conditional fiscal neutrality recognizes the fact that legitimate reasons might be taken into consideration when examining the relationship between district wealth and expenditures. The most popular policy application of conditional fiscal neutrality has been district power equalizing. This policy emphasizes the importance of local choice in the level of spending and is directed toward achieving taxpayer equity -- equal revenues for equal local tax effort. But while equity is provided in the raising of revenues, it is not insured in the distribution of revenues. Conditional

fiscal neutrality might be measured by examining the relationship between wealth and per pupil expenditure, holding tax effort constant. All else equal, a zero correlation would obtain in a system which is fiscally neutral. But as economists point out, all else in not equal; equal opportunity to choose one's level of taxation does not exist among districts of different wealth and the power-equalization principle is inconsistent with the concept of simple fiscal neutrality.[71] Furthermore, what may be equitable to taxpayers is not necessarily equitable for children, especially if children who need extra educational resources the most are in districts with taxpayers who are least willing to pay the additional price.

In the analyses which follow, particular attention will be given to simple fiscal neutrality since district power equalization was not one of the goals of the reform passed in Texas. Two methods of measuring simple wealth neutrality will be employed. The first examines zero-order correlations between district equalized property valuations and school district revenues. The second method compliments the first. While the Pearson correlation coefficient provides a single-number index of the relationship between two variables, it must be interpreted with care since it measures only <u>linear</u> relationships. Non-linear associations will be obscured and appear as low correlations. The bi-variable relationship of two variables may be examined more closely by ranking districts on property wealth per pupil and dividing them into pupil quintiles. Pupil-weighted means are then calculated for each group and compared with statistical tests

appropriate to a one-way analysis of variance.[72]

Table 6 shows zero-order correlations between district wealth and each of the school finance and demographic variables of interest in this study.[73] Tables 7 through 13 present the results of the quintile analysis. The correlations indicate that simple wealth neutrality has not existed in Texas, neither before nor after the reform. There persists a high degree of wealth-related inequality as indicated by the high correlation between district property wealth and the amount of local plus state revenue available for education. However, the correlation dropped slightly after the reform, indicating the reform contributed somewhat to simple wealth neutrality.

Local Effort by District Wealth. The relationship between district wealth and equalized tax rate is inverse, indicating that the greater the wealth of a district, the less the effort exerted by taxpayers for education. This relationship was also weakened slightly by the reform. If we examine the distribution of total equalized tax rate by wealth quintiles in Table 7, we see only a slight statewide increase -- about 12 percent on the average -- after the reform and almost no change in the distribution. The absence of any dramatic change is not surprising since the reform was not coupled with property tax reform. Local revenue increased only slightly overall, as might be expected from the very slight increase in the local property tax. One might have expected the opposite, that local effort would have decreased in the wake of such a large addition of new state money into the Foundation

TABLE 6

PEARSON CORRELATIONS RELATING TWO MEASURES OF DISTRICT WEALTH TO SCHOOL FINANCE AND DEMOGRAPHIC MEASURES IN TEXAS SCHOOL DISTRICTS, 1974-76

School Finance and Demographic Variables	MSA Market Value Per ADA, 1974		GOER MV/ADA 1975
	1974-75 (Before Reform)	1975-76 (After Reform)	
Equalized Tax Rate	-.381**	-.330**	-.374**
Local Revenue Per ADA	.691**	.610**	.664**
State Revenue Per ADA	-.320**	-.425**	-.393**
Local + State Rev. Per ADA	.628**	.540**	.622**
Federal Revenue Per ADA	-.167**	-.174**	-.190**
Total Revenue Per ADA	.609**	.503**	.583**
State Foundation Aid/ADA	-.335**	-.444**	-.433**
Local Enrichment Per ADA	.499**	.345**	.406**
Instructional Expend./ADA	.462**	.398**	.472**
Capital Expenditures/ADA	.132**	.134**	.121**
Current Oper. Expend./ADA	.566**	.484**	.542**
Total Expenditures/ADA	.452**	.415**	.441**
Percent Chicanos Enrolled	-.121**	-.113**	-.126**
Percent Blacks Enrolled	-.005	-.008	-.021
Percent Below Poverty	-.091*		-.031
Mean Family Income	.084*		.010
Percent Urban Population	-.174**		-.300**

Significance levels:

* = .05
** = .01

All correlations are weighted by ADA/State Avg. ADA.

TABLE 7

MEAN TOTAL EQUALIZED TAX MILLAGE AND LOCAL REVENUE PER PUPIL FOR PUPIL QUINTILES RANKED BY EQUALIZED PROPERTY VALUE PER PUPIL IN TEXAS SCHOOL DISTRICTS: 1974-5 AND 1975-6

Market Value Per Pupil Quintile[a] (1974)	Assessment Sales Ratio (Percent)	Total Effective Tax Rate (Mills)	High-Low (High/Low)	Local Revenue Per Pupil	High-Lo (High/Lo
1974-75 Average	53.5	8.98		$ 529	
Significance[b]	***	***		***	
$ 7,293-$30,799	58.7	10.05		253	
$30,800-$46,102	53.7	9.14		384	
$46,103-$55,889	59.3	9.80	-2.7 (.730)	524	$615 (3.43)
$55,890-$79,499	51.3	8.61		607	
$79,500 or More	44.7	7.29		868	
----------Reform Law Passed----------					
1975-76 Average	62.6	10.10		$ 596	
Significance	***	***		***	
$ 7,293-$30,799	71.6	10.93		289	
$30,800-$46,102	61.0	10.18		422	
$46,103-$55,889	65.0	10.78	-2.3 (.789)	565	$713 (3.47)
$55,890-$79,499	59.3	9.91		683	
$79,500 or More	56.2	8.57		1,002	

a. Each quintile of market value per pupil includes approximately one-fifth of the state's total number of pupils in average daily attendan

b. Significance Levels:

* = .05
** = .01
*** = .001

program. Apparently, wealthier districts responded to the increase in state aid by improving both their absolute and relative advantage in raising local revenues for education. The local revenue gap between high and low wealth quintiles increased by almost $100 after the reform, due chiefly to the $134 average increase among districts in the wealthiest quintile as contrasted to only a $36 increase in the lowest wealth quintile.

The reform in Texas was designed to raise the level of the Foundation School Program with additional state revenue and to set a uniform rate on market value of property for determining each district's share of the program costs. The intended effect of these two features of the new law was to diminish the necessity of raising additional local revenue to enrich the Foundation program and ultimately reduce the direct relationship between local enrichment and district wealth. This result was accomplished to some extent with the passage of HB 1126 as can be seen (in table 6) from the decrease in the correlation between local enrichment and market value per pupil (from .499 to .345). Although there remains a high degree of wealth discrimination, a district's ability to enrich its program from local funds after the reform is less highly wealth-related. The additional state Foundation program aid can be seen in Table 8 to have a wealth-neutralizing effect, both in terms of the actual dollar gap and the relative gap between high and low-wealth quintiles. As intended, local enrichment decreased overall from the year before to the year after the reform, but the actual dollar and relative gaps between high and low-wealth

TABLE 8

MEAN STATE FOUNDATION AID, LOCAL ENRICHMENT(EXCLUDING DEBT SERVICE) AND STATE EQUALIZATION AID FOR PUPIL QUINTILES RANKED BY EQUALIZED PROPERTY VALUE PER PUPIL IN TEXAS SCHOOL DISTRICTS, 1974-5 & 1975-6

Market Value Per Pupil Quintile* (1974)	State Foundation Aid Per ADA	High-Low (High/Low)	Local Enrichment Per ADA	High-Low (High/Low)	State Equaliza. Aid/ADA
1974-5 Average	$473		$285		0
Significance	***		***		
$ 7,293-$30,799	491		130		0
$30,800-$46,102	524	-$96 (.804)	202	$338 (3.600)	0
$46,103-$55,889	492		294		0
$55,890-$79,499	462		328		0
$79,500 or More	395		468		0
----------Reform Law Passed----------					
1975-6 Average	$606		$278		19
Significance	***		***		***
$ 7,293-$30,799	689		119		39
$30,800-$46,102	673	-$214 (.689)	184	$354 (3.975)	29
$46,103-$55,889	623		268		21
$55,890-$79,499	573		339		9
$79,500 or More	475		473		0

*Each quintile of market value per pupil includes approximately one-fifth of the state's total number of pupils in average daily attendance.

Significance Levels: * = .05
** = .01
*** = .001

categories increased. Also in Table 8, state "enrichment equalization aid" can be seen to provide only very little compensation for the very large gap that persists in local enrichment, since equalization aid amounted to only $19 per pupil on the average statewide.

State Aid by District Wealth. Prior to the 1975 reform, total state aid was slightly wealth equalizing, as can be seen from the moderate negative correlation (-.32) between state aid and district property wealth in Table 6. After the reform, this relationship was strengthened somewhat, indicating that the reform contributed to simple wealth neutrality. An examination of Table 9 indicates state aid helped districts in all wealth quintiles, but those in the lowest wealth quintile were helped the most. There was a 39 percent increase in state aid in the lowest wealth quintile compared to a 19 percent increase in the highest wealth quintile. In short, a slight but clearly discernable trend toward leveling up occurred as a result of the reform.

When state aid is combined with local revenues, one of the key research questions concerning the equalizing effect of the state law can be answered, viz., What is the effect of the law in reducing the relationship between district wealth and the total amount of local plus state revenue available for education? Table 9 shows that the gap between high and low wealth categories was reduced both in actual dollars (from $625 to $506) and relatively (from 1.81 to 1.50 times as great in the wealthiest as compared to the poorest quintile). But while the lowest wealth quintile benefitted

TABLE 9

MEAN STATE REVENUE AND STATE PLUS LOCAL REVENUE PER PUPIL FOR PUPIL QUINTILES RANKED BY EQUALIZED PROPERTY VALUE PER PUPIL IN TEXAS SCHOOL DISTRICTS: 1974-5 AND 1975-6

Market Value Per Pupil Quintile[a] (1974)	State Revenue Per Pupil	High-Low (High/Low)	State + Local Revenue Per Pupil	High-Low (High/Low)
1974-5 Average	$ 500		$1,029	
Significance[b]	***		***	
$ 7,293-$30,799	515		768	
$30,800-$46,102	559		943	
$46,103-$55,889	517	-$90 (.825)	1,041	$525 (1.683)
$55,890-$79,499	488		1,015	
$79,500 or More	425		1,293	
----------Reform Law Passed----------				
1975-6 Average	$ 636		$1,232	
Significance	***		***	
$ 7,293-$30,799	714		1,003	
$30,800-$46,102	710		1,132	
$46,103-$55,889	648	-$207 (.710)	1,213	$506 (1.50)
$55,890-$79,499	605		1,288	
$79,500 or More	507		1,509	

a. Each quintile or market value per pupil includes approximately one-fifth of the state's total number of pupils in average daily attendance.

b. Significance Levels:
* = .05
** = .01
*** = .001

the most (increasing by 31 percent), the next to the highest wealth quintile increased almost as much (27 percent). The middle and highest wealth quintiles increased least (by 17 percent).

Federal Aid by District Wealth. Federal aid is almost totally categorical aid targeted to pupil populations with special needs, and thus should not be considered in assessing the state's responsibility for providing an adequate and equitable system of funding education. Nonetheless, one of the research questions of this study concerns the impact of federal funds in the context of the state funding system. As can be seen from Tables 6 and 10, federal revenue is inversely related to district wealth and thus contributes to simple wealth neutrality. This inverse relationship is understandable in view of the fact that Chicanos, the largest minority group in Texas, are concentrated particularly in the lowest wealth quintile. But the extent to which federal aid contributes to simple wealth neutrality is attenuated by the very small amount that it constitutes of the total amount of revenue -- slightly more than 7 percent. Thus, when one examines the relationship between district wealth and the total amount of revenue from all sources, considerable wealth-related inequality is found even after the reform. Indeed, the dollar gap between the highest and lowest wealth quintiles decreased only slightly from $531 to $469 per pupil.

Capital Outlay in District Wealth. One expenditure item -- perhaps the only -- which indicated a change in the direction of less simple wealth neutrality after the reform was capital

TABLE 10

MEAN FEDERAL AND TOTAL REVENUE PER PUPIL FOR PUPIL QUINTILES RANKED BY EQUALIZED PROPERTY VALUE PER PUPIL IN TEXAS SCHOOL DISTRICTS: 1974-75 AND 1975-76

Market Value Per Pupil Quintile* (1974)	Federal Revenue Per ADA	Gap: High-Low (High/Low)	Non-Revenue Receipts	Total Revenue Non-Revenue Receipts/ADA	Gap: High-Low (High/Low)
1974-5 Average	$ 75		$ 91	$ 1,195	
Significance	***		**	***	
$ 7,293-$30,799	126		68	961	
$30,800-$46,102	74		87	1,104	
$46,103-$55,889	62	-$74 (.413)	92	1,194	$531 (1.55)
$55,890-$79,499	61		59	1,215	
$79,500 or More	52		146	1,492	
----------Reform Law Passed----------					
1975-6 Average	$ 96		$ 116	$ 1,444	
Significance	***			***	
$ 7,293-$30,799	172		86	1,261	
$30,800-$46,102	91		110	1,334	
$46,103-$55,889	67	-$117 (.320)	133	1,413	$ 469 (1.37)
$55,890-$79,499	101		83	1,472	
$79,500 or More	55		165	1,730	

*Each quintile of market value per pupil includes approximately one-fifth of the state's total number of pupils in average daily attendance.

Significance Levels:
* = .05
** = .01
*** = .001

expenditures. The direct relationship between district property wealth and capital outlay per pupil increased between 1974-5 and 1975-6. Table 11 shows an increase in the capital expenditures gap between high and low wealth quintiles after the reform, both in actual dollars and relatively. This is not surprising since capital improvements are not funded by the state but instead left to the choice -- or perhaps the ability -- of districts to pass local tax levies. It seems apparent that the additional state aid provided in the new law allowed the particularly wealthy districts the relief needed to raise additional local revenues for capital improvements, an effect which was not obtained among poorer districts.

By contrast, current operating expenditures became less wealth-related after the reform, as indicated by a slight decrease in their correlation with district wealth. However, the dollar gap between high and low wealth quintiles can be seen in Table 11 to be about the same after as before the reform, and the relative position of the low-wealth districts improved only slightly with the additional funding.

Teacher Salaries by District Wealth. Most of current operating expenditures go into teacher salaries. The 1975 legislation provided for across-the-board increases in personnel salaries. Salaries for educational personnel increased 12 percent on the average in the first year following the reform. Since no specific provision was included for closing the gap in salaries between rich and poor districts beyond the equalization for distributing foundation state aid, provisions of wealth-related disparities in

TABLE 11

MEAN CAPITAL OUTLAY AND TOTAL CURRENT OPERATING EXPENDITURES FOR PUPIL QUINTILES RANKED BY EQUALIZED PROPERTY VALUE PER PUPIL IN TEXAS SCHOOL DISTRICTS, 1974-5 and 1975-6

Market Value Per Pupil Quintile* (1974)	Capital Outlay Per ADA	High-Low (High/Low)	Current Oper. Expen. Per ADA	High-Low (High/Low)
1974-5 Average	$154		$ 926	
Significance	**		***	
$7,293-$30,799	117		774	
$30,800-$46,102	160		859	
$46,103-$55,889	167	$72 (1.62)	932	$330 (1.43)
$55,890-$79,499	135		957	
$79,500 or More	189		1,104	
----------Reform Law Passed----------				
1975-6 Average	$187		$1,150	
Significance	***		***	
$ 7,293-$30,799	153		1,020	
$30,800-$46,102	179		1,055	
$46,103-$55,889	173	$111 (1.73)	1,131	$324 (1.32)
$55,890-$79,499	165		1,192	
$79,500 or More	264		1,344	

*Each quintile of market value per pupil includes approximately one-fifth of the state's total number of pupils in average daily attendance.

Significance Levels: * = .05
** = .01
*** - .001

salaries still loomed large in the year following the reform. Some improvement toward simple wealth neutrality in the distribution of personnel salaries occurred, as can be seen in the decrease in the dollar gap between high and low wealth quintiles from $1,291 to $1,181. This improvement can be accounted for by the reduction in the gap in the amount of enrichment dollars used to pay personnel salaries. From the data presented in Table 12, it is obvious that local enrichment in both years contributed to most of the wealth-related disparities in personnel salaries.

One conclusion that might be reached from these findings on wealth-related inequalities is that the 1975 reform in Texas had a moderating effect on the high degree of wealth discrimination that exists in that state. Another conclusion is that after the reform there persisted a high degree of wealth-related disparity in school financing due largely to the ability of wealthy districts to enrich their basic foundation programs far more than the poorer districts. What remained after the reform is the classic type of wealth-discrimination which plaintiffs in the Rodriguez case argued were at the root of the inequities in the school finance system in Texas.

Percent Minority, Poor and Urban Enrolled by District Wealth. Of central concern in this study is the extent to which the wealth discrimination in Texas overlaps with discrimination against minority and poor students in the funding of education. How minority and poor studetns might fare in the wake of a reform which is wealth neutralizing is suggested by the zero-order correlations between property wealth and demographic measures shown in Table 6.

TABLE 12

MEAN SALARY AND ENRICHMENT SALARY OF PROFESSIONAL EDUCATIONAL PERSONNEL FOR PUPIL QUINTILES RANKED BY EQUALIZED PROPERTY VALUE PER PUPIL IN TEXAS SCHOOL DISTRICTS, 1974-5 and 1975-6

Market Value Per Pupil Quintile* (1974)	Average Personnel Salary	High-Low (High/Low)	Average Salary from Enrichment	High-Low (High/Low)
1974-5 Average	$ 9,638		$1,036	
Significance	***		***	
$ 7,293-$30,799	8,873		584	
$30,800-$46,102	9,234		665	
$46,103-$55,889	9,881	$1,291 (1.15)	1,173	$883 (2.51)
$55,890-$79,499	10,020		1,281	
$79,500 or More	10,164		1,467	
----------Reform Law Passed----------				
1975-6 Average	$10,800		$1,027	
Significance	***		***	
$ 7,293-$30,799	10,112		667	
$30,800-$46,102	10,448		665	
$46,103-$55,889	11,025	$1,181 (1.12)	1,147	$759 (2.14)
$55,890-$79,499	11,083		1,206	
$79,500 or More	11,293		1,426	

*Each quintile of market value per pupil includes approximately one-fifth of the state's total number of pupils in average daily attendance.

Significance Levels: * = .05
** = .01
*** = .001

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District property wealth has a small but highly significant and inverse relationship between percent Chicano enrollment and a relationship with percent Black enrollment that is not significantly different from zero. Thus, districts with high percent Chicano enrollments tend to have lower property wealth than those with low percent Chicano enrolled, but the relationship of district wealth and percent Black enrollment is either non-linear or zero. There is also a small, but highly significant correlation between district property wealth and percent of the student population which is urban, indicating that higher property values are more likely to be found in districts with non-urban populations. Table 13, which presents mean demographic characteristics by wealth quintiles, permits a closer examination of the relationship between the demographic characteristics and district property wealth, which may shed some light on the generally low correlation coefficients found in Table 6. The only demographic variable to show a dramatic difference among wealth quintiles is percent Chicano student enrollment. More than half of the pupils in the lowest property wealth quintile are Chicanos, whereas the other quintiles have one-fifth or less Chicano pupil enrollment. Districts with greater concentrations of Black pupils are more apt to be found in the fourth quintile of wealth, and conspicuously less in the lowest wealth quintile; but the relationship is non-monotonic, which explains the near zero correlation between percent Black and district wealth. Poor pupils tend to be more heavily concentrated in the lowest wealth quintile, but fairly evenly distributed

TABLE 13

DEMOGRAPHIC CHARACTERISTICS FOR PUPIL QUINTILES RANKED BY EQUALIZED PROPERTY VALUE PER PUPIL IN TEXAS SCHOOL DISTRICTS: 1974-75 AND 1975-76

Market Value Per Pupil Quintile	Percent Urban Student Enrollment	Percent Chicano Student Enrollment	Percent Black Student Enrollment	Percent Poor Student Enrollment
1974-75 Average	79.2%	23.9%	15.2%	21.4%
Significance	***	***	***	***
$ 7,293-$30,799	83.9	55.0	8.8	33.0
$30,800-$46,102	73.6	21.2	12.3	21.6
$46,103-$55,889	89.2	11.8	14.2	14.7
$55,890-$79,499	81.6	15.8	23.4	19.1
$79,500 or More	67.0	15.8	17.4	18.7

Significance Levels:

* = .05
** = .01
*** = .001

throughout the other quintiles. Percent urban population is lowest in the highest wealth quintile, but also non-monotonically related to district wealth. This provides some support for the claim that many of the small, property-wealthy districts are located in rural areas where the incidence of poverty is greatest. For this reason, we find a low correlation between personal income and district property wealth.

The next section examines the distribution of poor and minority pupils in the state in order to ascertain the degree of ethnic isolation by school district boundaries, and, ultimately, the extent to which district ethnic and poverty concentration relates to the distribution of school district revenue.

Statewide Isolation of Ethnic Groups and Poor

Approximately 40 percent of all pupils enrolled in Texas public schools during 1975-76 were members of ethnic minorities.[74] The two major ethnic minorities were Chicanos or Mexican Americans, constituting 24 percent of the total enrollment, and Blacks, who make up 15 percent of the pupil enrollment in the state. Approximately .5 percent of the pupils are members of other ethnic minorities and do not constitute a sufficiently large group to be separated out in the analyses presented here.

An estimated 21 percent of all pupils enrolled in Texas public schools were from families classified by the U.S. Census Bureau as below the poverty level.[75] The incidence of poverty is not evenly distributed among ethnic groups. While approximately one-third of the total population were Black, Chicano, or other ethnic minorities,

minority group members constituted almost two-thirds of the poor population in 1970. Chicanos accounted for 36 percent of the poor, and Blacks, 25 percent of the poor population.[76] In short, minorities are over-represented among the poor about two times their proportion in the total population. The incidence of poverty was highest for Blacks, with 38.6 percent of their members living below the poverty level, followed closely by Chicanos, with 35.5 percent living below poverty. Anglos had a considerably lower poverty rate, 10.4 percent. The differences in the incidence of poverty by ethnic group and by urban-rural residence are shown in Table 14.

TABLE 14
INCIDENCE OF POVERTY IN TEXAS BY URBAN AND RURAL RESIDENCE FOR ETHNIC GROUPS

Residence	Black	Mexican-American	Anglo	Total Population
Urban	35.8%	32.9%	8.8%	17.1%
Rural	53.5%	50.0%	16.1%	24.5%
All Residences	38.6%	35.5%	10.4%	18.6%

Source: Data are from first count census tapes and presented in Texas Dept. of Community Affairs, O.E.O., Poverty in Texas, 1973, p. 168.

About half of the Blacks (53.5 percent) and Chicanos (50.0 percent) living in rural areas were impoverished in 1970. While only 16.1 percent of rural Anglos were living below poverty, this group constituted 34.5 percent of the poor Anglo population; by

contrast, only 21.5 percent of poor minorities were living in rural areas. Thus, Anglos constituted over half of the rural poor and minority ethnic group members accounted for two-thirds of the urban poor. Such overlaps between ethnic and poverty group membership must be kept in mind when examining the findings on minority and poor pupil populations which follow.

Numbers of Ethnic and Poverty Group Members. Two methods are used for examining ethnic and income group isolation in Texas school districts. The first permits identification of concentrations of large numbers of ethnic or income group members. Districts were ranked by the number of pupils of a particular ethnic or income group, and the cumulative percentage of all members of that group is computed for the array from largest to smallest numbers of pupils. The distribution of Anglo, Chicano, Black and poor students by size of their 1975-76 enrollment is presented in Table 15.

Anglo and poor children are least isolated by school district boundaries. Approximately half of all Anglo pupils are enrolled in 54 school districts, and half of all pupils from families with incomes below poverty are situated in 47 districts. By contrast, half of all Chicano pupils are located in 18 districts and half of all Black pupils are in 7 districts. Blacks are concentrated into fewer districts than any of the other ethnic groups because of their urban status; 41.1 percent of all Black pupils are enrolled in three districts: Houston, Dallas and Fort Worth. One-fourth of all Chicano pupils in the state are concentrated in five districts: San Antonio, Houston, El Paso, Ysleta, and Corpus Christi.

TABLE 15

DISTRIBUTION OF ANGLO, CHICANO, BLACK, AND POOR STUDENTS BY SIZE OF THEIR ENROLLMENT IN TEXAS SCHOOL DISTRICTS: 1975-76

Ethnic or Income Group Enrollment	Anglo Students			Chicano Students			Black Students			Poverty Students		
	No. of Dist.	Number of Pupils	Cum. % Pupils	No. of Dist.	Number of Pupils	Cum. % Pupils	No. of Dist.	Number of Pupils	Cum. % Pupils	No. of Dist.	Number of Pupils	Cum. % Pupils
20,000 or more	23	391,993	25.7	5	158,398	25.7	3	158,186	41.1	2	58,821	11.2
10,000-19,999	18	253,297	42.4	7	104,667	42.7	1	12,331	44.3	5	65,020	23.5
5,000- 9,999	26	183,511	54.4	11	78,049	55.3	4	29,672	52.0	8	57,115	34.3
4,000- 4,999	13	57,652	58.2	8	34,218	60.9	6	25,836	58.7	2	8,710	36.0
3,000- 3,999	22	74,889	63.1	6	20,640	64.2	1	3,867	59.7	9	30,695	41.8
2,000- 2,999	56	138,980	72.2	20	46,858	71.8	7	16,517	64.0	21	51,906	51.7
1,000- 1,999	112	158,279	82.6	41	56,818	81.1	29	39,691	74.3	49	66,252	64.2
900- 999	27	25,646	84.3	8	7,624	82.3	5	4,752	75.5	12	11,277	66.4
800- 899	26	22,130	85.8	7	5,864	83.3	6	5,072	76.9	13	10,840	68.4
700- 799	40	30,036	87.7	12	8,941	84.7	15	11,367	79.8	24	18,001	71.8
600- 699	41	26,478	89.5	21	13,562	86.9	13	8,395	82.0	34	21,945	76.0
500- 599	53	29,204	91.4	20	10,803	88.7	15	8,194	84.1	31	17,146	79.2
400- 499	77	33,886	93.6	26	11,508	90.5	23	10,180	86.8	45	19,707	83.1
300- 399	101	34,885	95.9	46	15,905	93.1	24	8,205	88.9	67	23,884	87.5
200- 299	115	28,894	97.8	53	12,806	95.2	61	15,124	92.8	135	32,995	93.8
100- 199	166	23,870	99.4	105	15,183	97.6	102	14,419	96.6	184	27,166	98.9
1- 99	163	9,373	100.0	531	14,515	100.0	424	13,226	100.0	91	5,640	100.0
0	11	0	100.0	163	0	100.0	351	0	100.0	358	0	100.0
Totals	1,090	1,523,003		1,090	616,359		1,090	385,034		1,090	527,120	

District Percent Ethnic and Poverty Group Enrollment. The second approach to identifying ethnic isolation involves an examination of the concentration of ethnic or income group pupils in districts where they constitute a substantial proportion of the total enrollment. Table 16 presents the distribution of ethnic and poverty groups ranked by their percentage of the district total enrollment. It is immediately obvious that most Chicano students are concentrated in predominately Chicano school districts: 60 percent of all Chicano pupils in Texas are concentrated in districts in which they constitute more than 50 percent of the total enrollment. The same is not true for Black pupils: only 10 percent of all Black students are in districts with predominately Black pupil enrollments. The largest concentration of Black pupils is found in districts of 40-50 percent Black enrollment, since the three large urban districts of Houston, Dallas and Fort Worth are in this category. One-fourth of all poverty pupils are located in districts in which they are 50 percent or more of the total enrollment. A corollary to the isolation of minority pupils in predominately minority districts is the isolation of Anglo pupils in districts with low percentages of minority pupils. Only 18.6 percent of all Anglo pupils in the state are located in districts which have predominately minority pupil enrollments.

Ethnic isolation is shown geographically in Figures 3 and 4. Figure 3 identifies counties with more than 40 percent Mexican American population and those with more than 25 percent Black population. Counties with high percentages of Mexican Americans

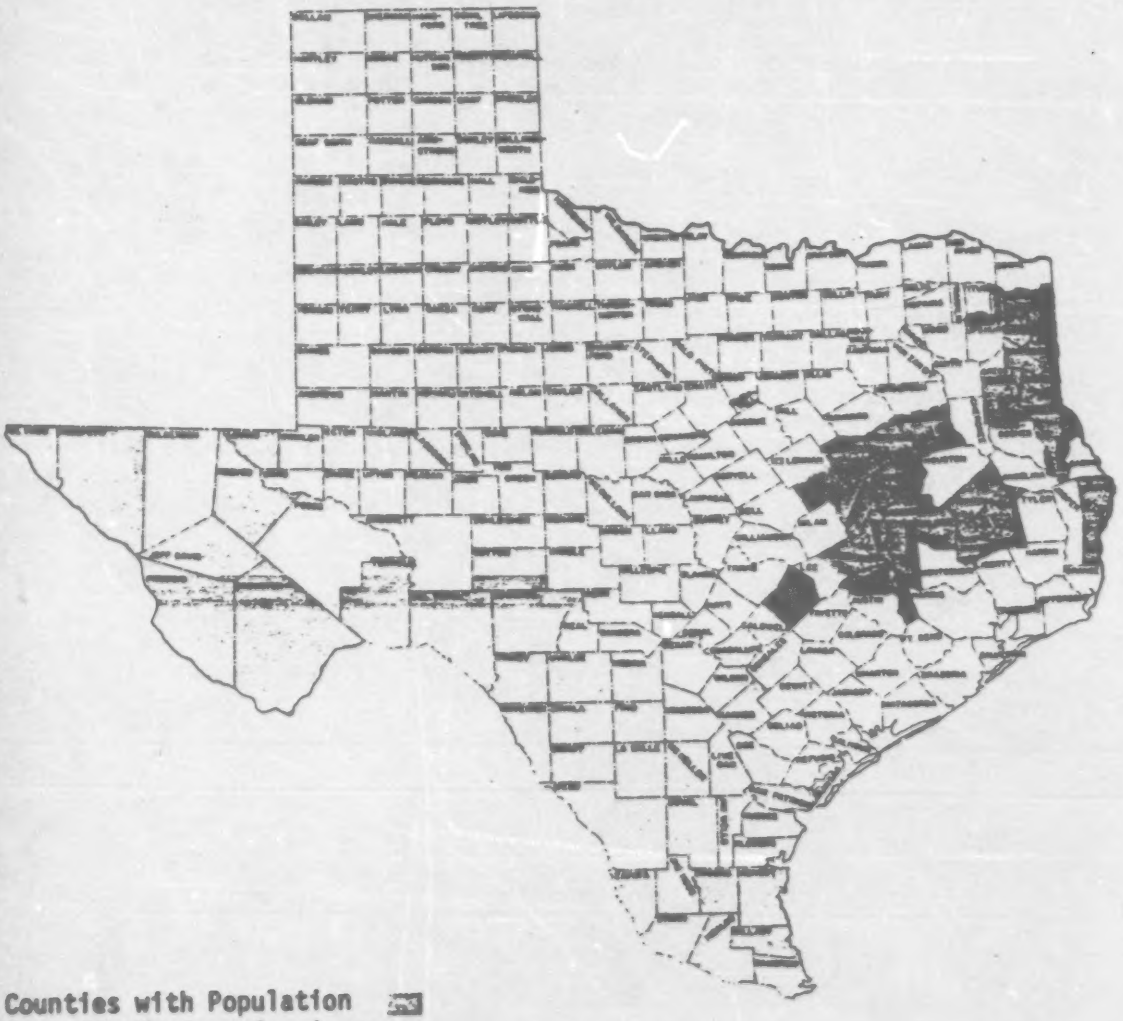
TABLE 16

DISTRIBUTION OF ANGLO, CHICANO, BLACK, AND POVERTY STUDENTS BY THE PERCENTAGE OF EACH GROUP OF DISTRICT ENROLLMENT IN TEXAS PUBLIC SCHOOLS: 1975-76

Student Ethnic Percentage	Anglo Students			Chicano Students			Black Students			Poverty Students		
	No. of Dist.	Number of Pupils	Cum. % Pupils	No. of Dist.	Number of Pupils	Cum. % Pupils	No. of Dist.	Number of Pupils	Cum. % Pupils	No. of Dist.	Number of Pupils	Cum. % Pupils
90 - 100	318	433,303	28.5	38	80,786	13.1	0	0	0	3	807	0.2
80 - 89.9	162	269,596	46.2	22	61,288	23.1	1	4,048	1.1	4	1,602	0.5
70 - 79.9	145	202,356	59.4	26	64,942	33.6	2	12,545	4.3	19	23,993	5.0
60 - 69.9	139	222,981	74.1	23	115,188	52.3	10	3,071	5.1	41	62,283	16.8
50 - 59.9	99	111,860	81.4	51	45,066	59.6	14	18,334	9.9	79	50,813	26.5
40 - 49.9	84	105,415	88.3	51	23,754	63.4	34	156,522	50.5	144	78,258	41.3
30 - 39.9	43	120,011	96.2	63	22,635	67.1	59	61,182	66.4	179	126,622	65.3
20 - 29.9	27	28,051	98.1	76	95,444	82.6	87	33,257	75.0	168	150,421	93.9
10 - 19.9	27	23,734	99.6	141	75,383	94.8	133	53,941	89.1	72	24,770	98.6
5 - 9.9	15	4,385	99.9	109	15,945	97.4	121	25,901	95.8	24	7,546	100.0
.01 - 4.9	20	1,294	100.0	327	15,916	100.0	278	16,232	100.0	0	0	100.0
0	11	0	100.0	163	0	100.0	351	0	100.0	358	0	100.0
Totals	1,090	1,522,986		1,090	616,347		1,090	385,033		1,090	527,115	

FIGURE 3

TEXAS COUNTIES WITH HIGH PERCENTAGES OF ETHNIC MINORITIES



Counties with Population Over 40% Mexican-American

Counties with Population Over 25% Black

Source: Texas Department of Community Affairs, Poverty in Texas. Austin, Texas: Office of Economic Opportunity, May 1974.

are in the Southwestern part of the state, particularly along the U.S.-Mexico border. The counties with high concentrations of Blacks are in East Texas. The two minority groups are clearly distinct geographically and, therefore, will not be lumped together into a "minority group" category in the analyses which follow, but will be treated separately.

Figure 4 displays the incidence of poverty by county. The high poverty counties are virtually the same counties identified in the preceding map as counties with high proportions of Chicano or Black populations. This coincidence of poverty and ethnic minority status must be kept in mind when examining the results of this study.

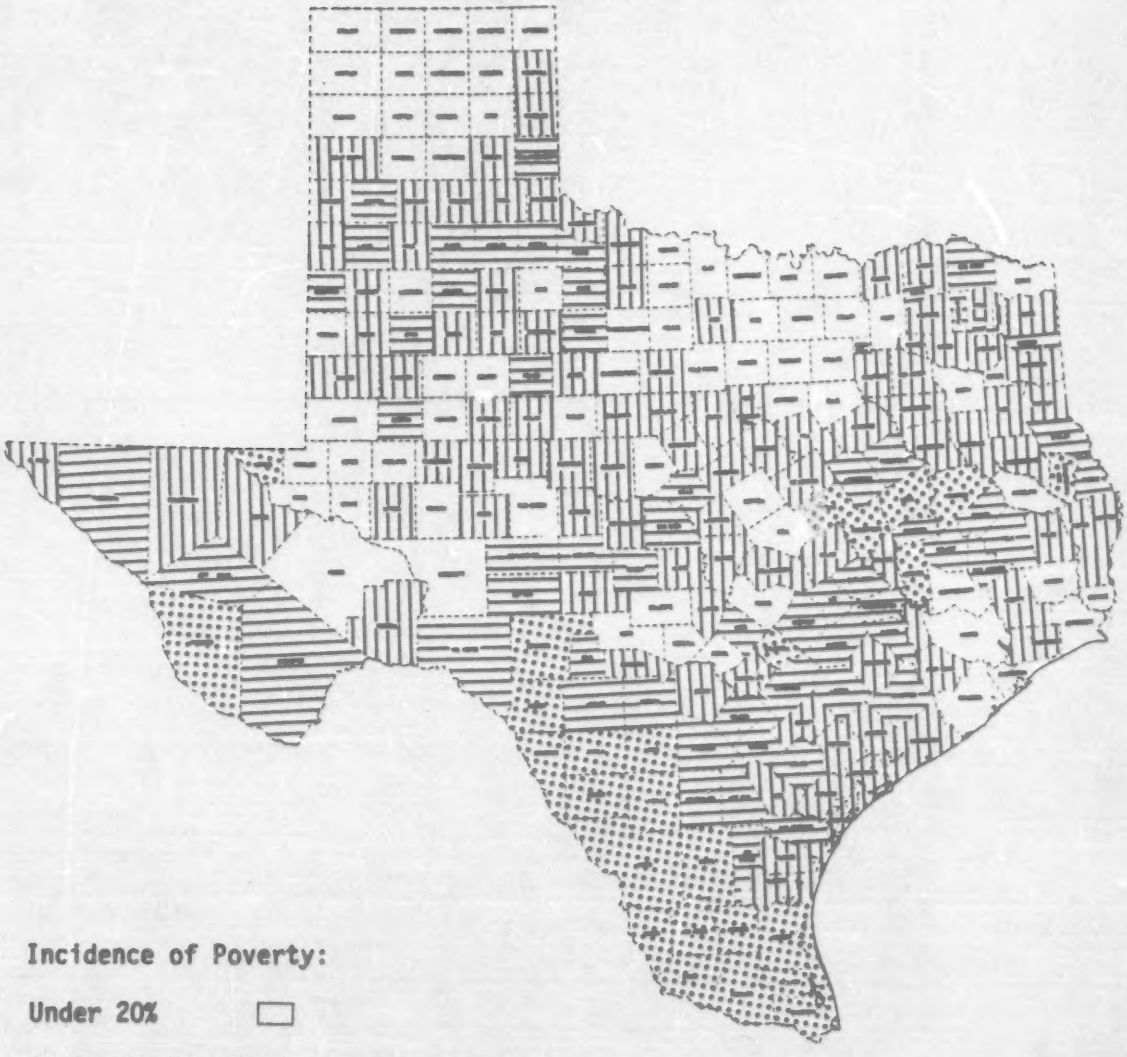
In sum, Black pupils are concentrated in a few large central city school districts in the eastern part of the state, where they constitute between 40 and 50 percent of district enrollment. Chicano pupils are located in the southwestern part of the state in both urban and rural districts where the enrollment is predominately of their own ethnic group. Students from families below poverty are largely concentrated wherever there are minority pupils. More than half of the minority pupils living in rural areas are impoverished, although Anglos make up more than half of the rural poverty population.

District Wealth by Ethnic and Income Group

The location of ethnic minorities and the poor vis-a-vis property wealth in the state is an important consideration prior

FIGURE 4

INCIDENCE OF POVERTY IN TEXAS BY COUNTY



Source: Texas Department of Community Affairs, Poverty in Texas. Autin, Texas: Office of Economic Opportunity, May 1974.

to examining the distribution of educational revenues for two reasons: (1) local revenues are largely a function of local property wealth and (2) state aid under the reform is distributed in part on the basis of district property values.

Table 17 displays the distribution of the GOER market value estimates per pupil for the 1975 tax year among each ethnic group and among poverty students. An examination of the median value for each group indicates that half of all Black pupils are in districts with taxable market values of less than $97,258 per pupil, half of Anglos in districts of less than $78,643 per pupil, half of Chicanos in districts with values of less than $57,786 per pupil, and half of all poverty pupils in districts of less than $70,027 per pupil. Approximately 80 percent of Chicano pupils and 70 percent of Anglo and poverty pupils are below the median market value for Black pupils.

Another measure of central tendency describing the position of each minority and income group with respect to property wealth is the weighted pupil mean. Each district's property value per pupil was weighted by the number of pupils of that group in the district, summed across all districts and divided by the total number of pupils of that ethnic group in the state. An F-test for the significance of difference among ethnic group means was calculated and then a post-hoc Scheffé test was computed for pair-wise comparisons.[77] Mean market value estimates from two sources for each ethnic group and poverty pupils are presented in Table 18. As in the comparison of median values, Chicano pupils are most

TABLE 17

DISTRIBUTION OF EACH ETHNIC GROUP IN TEXAS SCHOOL DISTRICTS RANKED BY GOER* MARKET VALUE OF TAXABLE PROPERTY PER PUPIL IN ADA, 1975

Pupil Percentile	Distribution of 1975 Market Value Per ADA By Ethnic Group and Poverty Status			
	Chicano Pupils	Black Pupils	Anglo Pupils	Poverty Pupils
Lowest	$ 11,926	$ 11,926	$ 11,926	$ 11,926
10	25,017	45,574	47,261	27,752
20	35,131	62,324	58,786	42,266
30	42,266	70,027	62,749	54,373
40	47,670	81,997	68,459	61,214
50 (median)	57,786	97,258	78,643	70,027
60	68,005	97,258	87,462	86,756
70	87,462	100,674	100,674	97,258
80	99,593	100,274	110,603	104,742
90	126,200	113,526	156,695	139,625
95	183,864	148,937	213,616	196,782
Highest	7,279,280	1,585,342	16,859,072	1,646,937

*Market value estimates are from the Governor's Office of Educational Resources for tax year 1975.

disadvantaged with respect to property wealth of the districts in which they reside; however, Black and Anglo pupils reverse their relative positions when weighted pupil means are examined. This is a reflection of the fact that not many Black pupils are located in small rural districts with extremely high per pupil property values; consequently, the mean for Blacks is not inflated by these "outlier" districts as it is for Anglos and Chicanos. On the average, statewide during 1975, there was $99,761 in taxable property behind each Anglo pupil, $91,180 behind each Black pupil, $79,753 behind each Chicano pupil, and $87,765 behind each poverty pupil. The difference between pupils below and those above the poverty level were not statistically significant. It is obvious from the large standard deviations in many of the groups that there is often more within-group than between-group variance, a reflection of the fact that the various group distributions overlap considerably. While interpreting group differences, the reader should keep in mind that the various groups are not distinct sets of districts; all districts with any members of a particular ethnic or income group are represented in the group mean in relative proportion to the size of their ethnic or income group enrollment.

Differences in educational needs and costs, and non-educational tax burdens aside, we would expect to find more local revenue and less state aid for Black and Anglo pupils than for Chicano pupils. The next section examines the distribution of revenues by source among the various ethnic and income groups before and after the 1975 reform.

TABLE 18

STATEWIDE MEAN PROPERTY VALUES AND PERCENT URBAN
BY ETHNIC GROUP IN TEXAS SCHOOL DISTRICTS

Ethnic and Income Groups	Mean Property Value/ADA (1974)	Standard Deviation	Mean Property Value/ADA (1975)	Standard Deviation	Percent of Pupils in ADA 1974-5
ALL PUPILS	$ 62,373	$ 80,515	$ 93,519	$ 99,133	(2,523,211)
Significance	*		*		
Black	62,968	46,116	91,180	56,882	15.2
Anglo	76,783	76,783	99,761	99,983	60.8
Chicano	52,621	103,117	79,753	115,340	23.9
					99.9
Significance					
Poor	57,448	73,763	87,765	88,396	21.4
Non-Poor	62,462	65,074	89,828	77,588	78.6
					100.0

Significance Levels:
* = .05
** = .01
*** = .001

Statewide Means By Ethnic and Income Group

Utilizing the procedure described above for computing the weighted pupil mean, statewide averages for each ethnic group and poor and non-poor pupils were calculated on each of the school finance variables. Table 19 shows on the average statewide very little difference between ethnic groups in regard to tax effort both before and after the passage of HB 1126. Chicano pupils are located in districts with significantly higher equalized tax rates than either Black or Anglo pupils before the reform, but the differences after the reform are non-significant. Poor/non-poor differences are small both before and after the reform.

Because of the differences in property values in districts where the various ethnic groups attend school, Chicano pupils are on the average $166 behind Anglo pupils in the amount of local revenue raised for education before the reform. Black pupils lagged somewhat less behind Anglos in that year. Both groups improved their relative positions only slightly in regard to local revenue after the reform was passed, but Chicanos continued to receive about three-fourths the amount of local revenue as Anglos. Poor pupils maintained about the same relative disadvantage of approximately $80 per pupil in local revenue before and after the reform. The differences in local revenues can be accounted for by variations in property values rather than by tax effort differences.

State revenue contributed very little to closing the gap between ethnic groups. As Table 20 demonstrates, Black pupils were in districts receiving $16 less in state aid per pupil on the

TABLE 19

STATEWIDE MEAN TAX EFFORT FOR EDUCATION AND LOCAL REVENUE PER PUPIL BY ETHNIC AND INCOME GROUP IN TEXAS SCHOOL DISTRICTS, 1974-5 and 1975-6

Ethnic or Income Group	Total Effective Tax Rate (Mills)	Minority-Anglo (Minority/Anglo) Poor-Non Poor (Poor/Non Poor)		Local Revenue Per ADA	Minority-Anglo (Minority/Anglo) Poor-Non Poor (Poor/Non Poor)	
1974-5 Average	9.0			$529		
Significance	**			***		
Black	8.9	0	(1.00)	555	-$41	(.931)
Anglo	8.9			596		
Chicano	9.4	.5	(1.06)	430	-$166	(.721)
Significance	ns			***		
Poor	8.8	-.3	(.967)	462	-$79	(.854)
Non Poor	9.1			541		
----------Reform Law Passed----------						
1975-6 Average	10.1			$ 596		
Significance	ns			***		
Black	9.9	-.1	(.990)	630	0	(1.00)
Anglo	10.0			630		
Chicano	10.3	.3	(1.03)	491	-$139	(.779)
Significance	*			***		
Poor	9.8	-.4	(.961)	524	-$83	(.863)
Non Poor	10.2			607		

Significance Levels:

* = .05
** = .01
*** = .001

TABLE 20

STATEWIDE MEAN STATE REVENUE AND LOCAL + STATE REVENUE PER PUPIL BY ETHNIC AND INCOME GROUP IN TEXAS SCHOOL DISTRICTS: 1974-5 AND 1975-6

Ethnic or Income Group	State Revenue Per ADA	Minority-Anglo (Minority/Anglo) Poor-Non-Poor (Poor/Non-Poor)	Local + State Revenue Per ADA	Minority-Anglo (Minority/Anglo) Poor-Non-Poor (Poor/Non-Poor)
1974-5 Average	$ 501		$ 1,030	
Significance			***	
Black	487	-$16 (.968)	1,024	-$75 (.932)
Anglo	503		1,099	
Chicano	503	$ 0 (1.00)	933	-$166 (.849)
Significance			***	
Poor	510	$14 (1.03)	972	-$64 (.94)
Non-Poor	496		1,036	
Reform Law Passed				
1975-6 Average	$ 636		$ 1,232	
Significance	**		***	
Black	623	$ 7 (.989)	1,253	-$ 7 (.994)
Anglo	630		1,260	
Chicano	659	$29 (1.05)	1,150	-$110 (.913)
Significance	**		**	
Poor	660	$32 (1.05)	1,184	-$51 (.96)
Non-Poor	628		1,235	

Significance Levels:

* = .05
** = .01
*** = .001

average than Anglo pupils, and Chicano pupils were in districts receiving the same as Anglos before the reform. Since the law was passed, districts in which Chicano and Black pupils are located benefited slightly more than districts in which Anglo pupils are living; Chicano pupils are now receiving on the average $29 more state aid per pupil than Anglo pupils. Pupils from poverty families increased their $14 per pupil advantage only slightly to $32 per pupil.

The net equity effect of state aid as a result of the reform was evident but not dramatic. Chicanos on the average improved their disadvantaged position in regard to local plus state revenue per pupil, from $166 to $110 less than Anglos, and the gap between Anglo and Black pupils was closed almost totally from $75 to $7 less than Anglo pupils. The gap between poor and non-poor pupils was reduced only very slightly.

Federal revenues received by districts in which ethnic minorities and poverty pupils reside, as can be seen in Table 21, help equalize the group disparities found in the state system of school finance. As mentioned previously, the extent to which federal funds compensate for interethnic and interclass inequities is diminished by the small proportion -- 7 percent -- that federal funds comprise of the total revenue. It must be remembered that federal funds are chiefly for the support of programs geared to pupils with special needs and are not intended to supplant funds for the regular school program. Thus, after federal funds are added to revenue from other sources, one would expect greater revenues per each

TABLE 21

STATEWIDE MEAN FEDERAL AND TOTAL REVENUE PER PUPIL BY ETHNIC AND INCOME GROUP IN TEXAS SCHOOL DISTRICTS: 1974-5 AND 1975-6

Ethnic or Income Group	Federal Revenue Per ADA	Minority-Anglo (Minority/Anglo) Poor-Non-Poor (Poor/Non-Poor)	Total Revenue Per ADA	Minority-Anglo (Minority/Anglo) Poor-Non-Poor (Poor/Non-Poor)
1974-5 Average	$ 75		$ 1,194	
Significance	***		***	
Black	79	$23 (1.41)	1,163	-$68 (.945)
Anglo	56		1,231	
Chicano	119	$63 (2.13)	1,124	-$107(.913)
Significance	***		*	
Poor	104	$27 (1.55)	1,146	-$52 (.96)
Non-Poor	67		1,198	
----------Reform Law Passed----------				
1975-6 Average	$ 97		$ 1,445	
Significance	***		*	
Black	109	$41 (1.60)	1,427	-$48 (.967)
Anglo	68		1,475	
Chicano	159	$91 (2.34)	1,382	-$93 (.934)
Significance	***			
Poor	135	$48 (1.55)	1,407	-$39 (.97)
Non-Poor	87		1,446	

Significance Levels:

* = .05
** = .01
*** = .001

minority or poor child than per Anglo child. This was not the case. Table 21 shows that after federal revenue and local non-revenue receipts[78] are added to local plus state revenue, the gap between ethnic minority and Anglo groups and between poor and non-poor pupils narrows somewhat, but Blacks are still $68 behind on the average statewide and Chicanos $107 behind Anglos for the year before the reform. After the reform, the relative and actual dollar disadvantage of Chicano and Black pupils vis-a-vis Anglo pupils decreased, but only slightly. Chicano pupils after the reform were receiving $93 less and Black pupils $48 less than Anglos in total revenue per pupil. The gap between poor and non-poor pupils lessened only slightly, from $52 to $39 less for poor pupils.

The picture with regard to inequities in personnel salaries is somewhat different from that of total revenue. As Table 22 indicates, Blacks are attending districts which pay slightly higher annual salaries than districts which Anglo pupils attend, and both groups are in districts which pay considerably higher salaries on the average than districts attended by Chicano pupils. The location of Blacks in large central city districts where wage scales are generally higher may explain their relatively advantaged position in regard to salaries. Much of the salary gap between Blacks and Anglos is from local enrichment funds. Blacks lost somewhat in their salary advantage after the reform and Chicano pupils did not improve their already disadvantaged position with respect to personnel salaries. Poor pupils also maintained their relatively disadvantaged position with respect to the average salary of personnel in their districts

TABLE 22

STATEWIDE MEAN SALARY OF PERSONNEL
BY ETHNIC AND INCOME GROUP IN
TEXAS SCHOOL DISTRICTS: 1974-5 AND 1975-6

Ethnic or Income Group	Average Salary of Personnel	Minority-Anglo (Minority/Anglo) Poor-Non-Poor (Poor/Non-Poor)	Avg. Salary From Local Enrichment	Minority-An (Minority/An Poor-Non-Po (Poor/Non-Po
1974-5 Average	$ 9,637		$ 1,036	
Significance	***		***	
Black	9,984	$253 (1.03)	1,275	$216 (1.20)
Anglo	9,731		1,059	
Chicano	9,180	-$551 (.943)	825	-$234 (.779)
Significance	***		***	
Poor	9,354	-$369 (.96)	847	-$262 (.76)
Non-Poor	9,723		1,109	
----------Reform Law Passed----------				
1975-6 Average	$ 10,800		$ 1,026	
Significance	***		***	
Black	11,097	$184 (1.02)	1,257	$222 (1.21)
Anglo	10,913		1,035	
Chicano	10,333	-$580 (.947)	861	-$174 (.832)
Significance	***		***	
Poor	10,502	-$384 (.96)	859	-$232 (.79)
Non-Poor	10,886		1,091	

Significance Levels:

* = .05
** = .01
*** = .001

after the reform.

In short, the gap between Anglo pupils and each of the other ethnic minorities was narrowed very slightly as a result of the new state aid, and also to some extent because of a closing of the gap in local revenues. There remains, however, a large gap between Anglo and Chicano pupils and a moderate gap between Anglo and Black pupils, with the minorities at a disadvantage with respect to the amount of revenue available for education.

Ethnic and Income Group Disparities Within Community Types

Presumably, disparities in school finance among ethnic and income groups can be explained in terms of characteristics of the districts in which these pupils are enrolled. The major task in accounting for these disparities involves probing those "explanatory" factors. Considerable research indicates that community type or locale is an important variable to be considered as a candidate for explaining intergroup differences.[79] Districts were categorized into seven groups of community types; within each community type differences among ethnic and income groups were examined.

Demographic characteristics of the various community types are presented in Table 23. Major urban districts -- the "big seven" as they are referred to in Texas -- consist of Houston, Dallas, Fort Worth, San Antonio, El Paso, Austin, and Corpus Christi. These districts have a greater percentage of minority pupils (61 percent) than any of the other community types, a fairly high percentage of poverty pupils, and a slightly better than average property valuation. In "other central cities" of SMSA's, about half of the

TABLE 23

DEMOGRAPHIC CHARACTERISTICS OF TEXAS SCHOOL DISTRICTS BY COMMUNITY TYPE

Community Type	Percent Blacks Enrolled (1975-6)	Percent Chicanos Enrolled (1975-6)	Mean Family Income (1969)	Percent Below Poverty (1969)	MSA Market Value Per ADA (1974)	GOER Market Value Per ADA (1975)	Percent of All Pupils in ADA (1975-6)	Number of Districts
State Average	15%	24%	$9,928	21%	$63,334	$93,494		
Significance	***	***	***	***	***	***		
Major Cent. City	31	29	10,783	21	58,070	82,039	23.0%	7
Other Cent. City	16	33	8,889	28	40,449	55,812	12.3	24
Fast-Growth Suburb	7	14	12,109	10	56,508	76,414	21.0	64
Stable Suburb	6	21	10,988	13	50,673	67,988	8.1	32
Non-Metro. (1000 + ADA)	12	28	8,269	28	70,294	105,578	25.5	265
Non-Metro. (-1,000 ADA)	10	20	7,408	31	91,176	162,556	5.0	204
Rural	11	15	7,511	29	128,442	220,335	5.1	492
							100.0%	1088

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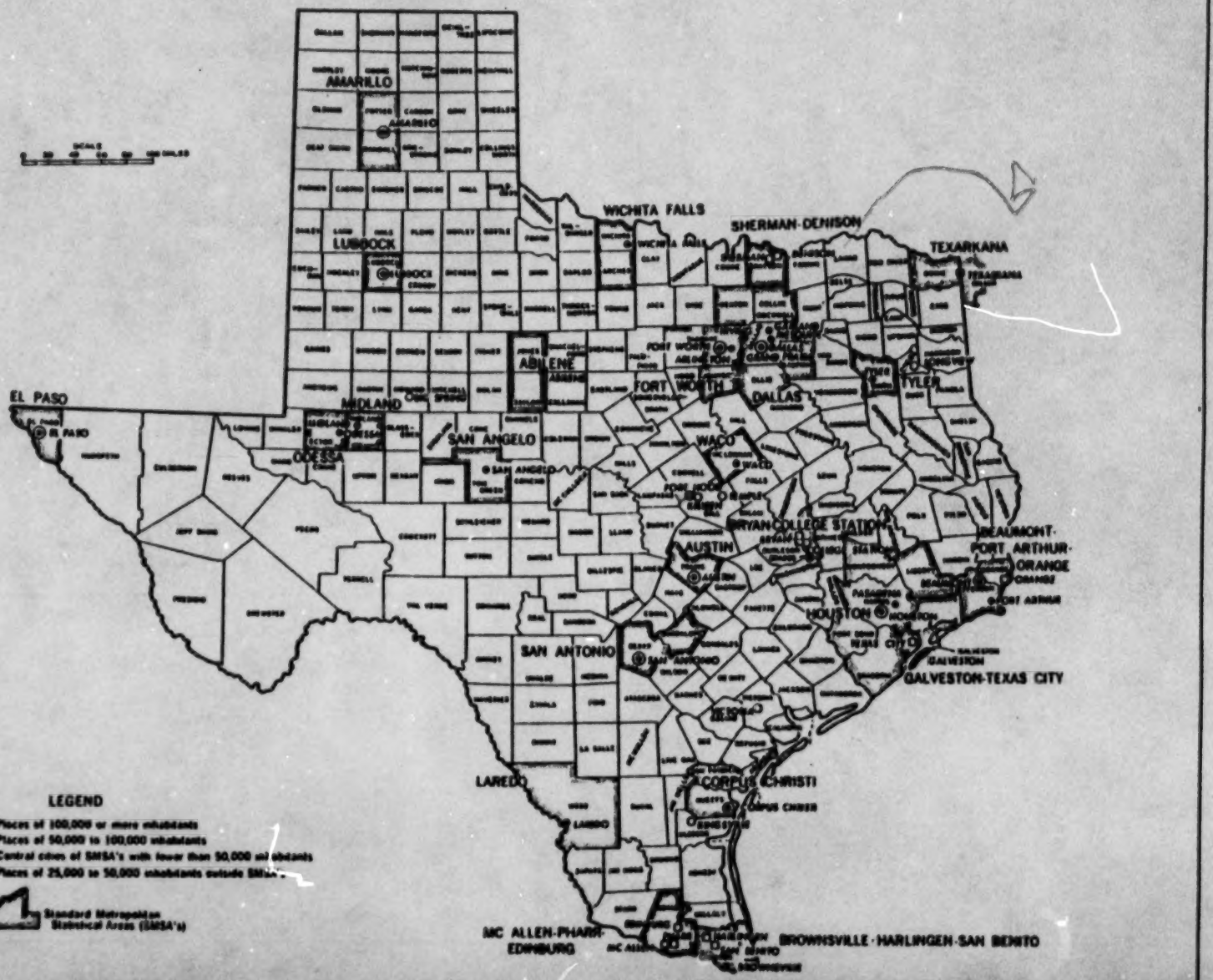
pupils are minorities, a somewhat higher percentage of poverty pupils, and below average property values.

Suburban districts -- classified as fast- or slow-growing -- have predominately Anglo residents with higher than average incomes, and slightly lower than average property values. "Non-metropolitan districts with 1,000 or more pupils" have about the average percentage of minority pupils in the state, families with below average incomes, and above average property values. "Non-metropolitan districts with towns" (and less than 1,000 pupils) and rural districts have pupil enrollments which are about three-fourths Anglo, very low income and high poverty, and very high property values.

For purposes of this analysis, the community types were collapsed into four fairly homogeneous groups: central city SMSA districts, urban fringe (or suburban) SMSA districts, city districts with 1,000 or more pupils in ADA, and small town or rural districts. (The SMSA's counties, which include central city and suburban districts, are shown in Figure 5.) Weighted pupil means were then computed for each ethnic and income group within community types. Group means were compared within community types by analysis of variance. The distribution of each ethnic and income group by community type is shown in Table 24. The largest numbers of Black and Chicano pupils are located in the central city districts of the 21 Standard Metropolitan Statistical Areas in the state. Anglo pupils are most likely to be found in the urban fringes of these SMSA central cities. Pupils from families with incomes below the poverty level are also concentrated mostly in central cities of SMSA's. Although the incidence of poverty is highest in the small

FIGURE 5

TEXAS COUNTIES, STANDARD METROPOLITAN STATISTICAL AREAS (SHADED), AND SELECTED PLACES*



Source: U.S. Bureau of the Census, Census of Population: 1970,

TABLE 24

DISTRIBUTION OF ETHNIC AND INCOME GROUPS
BY COMMUNITY TYPE OF TEXAS SCHOOL DISTRICTS, 1974-75

Ethnic & Income Groups	SMSA Central Cities	SMSA Urban Fringe	Non-Metro. Cities of 1000+ ADA	Small Town -Rural	Total
Ethnic Groups					
Black	59.1%	12.8	20.7	7.3	99.9%
Anglo	26.7%	36.0	25.5	11.8	100.0%
Chicano	43.8%	19.0	29.8	7.4	100.0%
Income Groups*					
Poor	39.5%	14.5	34.7	11.3	100.0%
Nonpoor	35.8%	33.0	24.1	7.1	100.0%
All Pupils	35.7%	28.3	25.9	10.1	100.0%

*Districts of less than 300 pupils are excluded from the analysis by income group since census data are not available for these districts. This results in excluding 1.8% of all Texas pupils.

town-rural districts, only 11.3 percent of all poverty pupils are located in these districts. Indeed, only 10 percent of all pupils in Texas public schools are located in the small town-rural category of districts.

Table 25 presents mean property values on two measures of equalized valuation per pupil by ethnic and income group within community type. Chicano pupils are disadvantaged with respect to property values in all community types except small town-rural districts. They are at the greatest disadvantage in central city and urban fringe districts. Black pupils are disadvantaged in regard to property wealth everywhere except in central city districts. Ethnic group differences, while they are large, are not significant within non-metropolitan cities and small town-rural areas chiefly because of the large amount of within-group variation. Poor students are at a disadvantage with respect to property wealth in every community type, but only differences within central city districts are statistically significant.

Table 26 displays mean equalized tax rates on MSA market values by ethnic and income group and by community type. It is clear that tax rates are higher in metropolitan areas than in moderate size cities, and even lower in small town and rural districts. However, within each community type, ethnic and income group differences were not significant with one exception: central city districts in which Chicano pupils are located have higher effective tax rates than central city districts in which Anglo and Black pupils are located.

TABLE 25

MEAN MARKET VALUE OF PROPERTY PER PUPIL* FOR EACH ETHNIC AND INCOME GROUP BY COMMUNITY TYPE IN TEXAS SCHOOL DISTRICTS: 1975 AND 1977

Ethnic & Income Groups By Community Type	MSA Market Value Per Pupil					
	1974 MSA Values	Minority-Anglo (Minority/Anglo)		1975 GOER Values	Minority-Anglo (Minority/Anglo)	
Central City Avg.	$ 51,977			$ 72,887		
Significance	***			***		
Black	62,836	$ 9,039	(1.17)	85,930	$11,471	(1.15)
Anglo	53,797	-$14,006	(.740)	74,459	-$14,896	(.800)
Chicano	39,791			59,563		
Significance	**			**		
Poor	46,535	-$ 7,082	(.868)	66,296	-$ 8,601	(.885)
Non Poor	53,617			74,897		
Urban Fringe Avg.	$ 54,842			$ 74,082		
Significance	***			***		
Black	50,122	-$ 9,612	(.839)	64,146	-$16,062	(.800)
Anglo	59,734	-$26,419	(.558)	80,208	-$30,817	(.616)
Chicano	33,315			49,391		
Significance						
Poor	44,897	-$11,022	(.803)	62,065	-$13,225	(.824)
Non Poor	55,919			75,290		
City (1,000 + ADA)	$ 70,325			$105,622		
Significance						
Black	63,204	-$11,597	(.845)	99,308	-$12,236	(.890)
Anglo	74,801	-$11,048	(.852)	111,544	-$15,902	(.857)
Chicano	63,753			95,642		
Significance						
Poor	62,808	-$10,589	(.856)	97,115	-$12,096	(.889)
Non Poor	73,397			109,211		
Small Town & Rural Avg.	$109,814			$191,635		
Significance						
Black	86,107	-$21,905	(.797)	162,512	-$27,186	(.857)
Anglo	108,012	$ 24,210	(1.22)	189,698	$27,383	(1.14)
Chicano	132,222			217,081		
Significance						
Poor	94,772	-$ 5,237	(.948)	167,985	-$ 1,250	(.993)
Non Poor	100,009			169,235		

*Market value estimates are provided by the Governor's Office of Educational Resources from a study conducted by Management Services Association of Austin, Texas for 1974 and by the Governor's Office for 1975. Since different methodologies were used in the studies to arrive at estimates of full market value, the two years are not comparable.

Significance Levels: *=.05; **=.01; ***=.001.

TABLE 26

MEAN TOTAL EFFECTIVE TAX RATE (MILLS)* FOR EACH ETHNIC AND INCOME GROUP BY COMMUNITY TYPE IN TEXAS SCHOOL DISTRICTS: 1974-75 AND 1975-76

Ethnic & Income Groups By Community Type	Total Effective Tax Rate (Mills) on MSA Values 1974-75	Minority-Anglo (Minority/Anglo)	1975-76	Minority-Anglo (Minority/Anglo)
Central City Avg.	9.8		10.8	
Significance	***		**	
Black	9.3	-.3 (.969)	10.5	-.1 (.991)
Anglo	9.6		10.6	
Chicano	10.4	.8 (1.08)	11.2	.6 (1.06)
Significance				
Poor	10.0	.3 (1.03)	10.9	.2 (1.02)
Non Poor	9.7		10.7	
Urban Fringe Avg.	9.8		11.1	
Significance				
Black	9.8	0 (1.00)	10.8	-.4 (.964)
Anglo	9.8		11.2	
Chicano	9.7	-.1 (.990)	11.1	.1 (.991)
Significance				
Poor	9.4	-.4 (.959)	10.7	-.5 (.955)
Non Poor	9.8		11.2	
City (1,000 + ADA) Avg.	7.9		8.8	
Significance				
Black	7.7	-.1 (.987)	8.4	-.4 (.954)
Anglo	7.8		8.8	
Chicano	8.2	.4 (1.05)	9.1	.3 (1.03)
Significance				
Poor	7.9	0 (1.00)	8.8	0 (1.00)
Non Poor	7.9		8.8	
Small Town & Rural Avg.	6.6		7.6	
Significance				
Black	6.5	0 (1.00)	7.4	-.1 (.987)
Anglo	6.5		7.5	
Chicano	7.0	.5 (1.08)	8.2	.7 (1.09)
Significance				
Poor	6.7	-.1 (.985)	7.6	-.1 (.987)
Non Poor	6.8		7.7	

Significance Levels:
* = .05
** = .01
*** = .001

*Tax rates are based on market value estimat of taxable property by Management Services Associates of Austin, Tx., under contract with the Governor's Office of Educational Resources.

The distribution of local revenue closely approximates the differences in property wealth among ethnic and income groups within community types. As can be seen in Table 27, Chicano pupils were located in districts raising the least local revenue in all community types except small town-rural areas. Chicano pupils were not disadvantaged relative to Anglo pupils in urban fringe districts, both before and after the reform. In fact, Chicanos were farther behind Anglo pupils in absolute dollars per pupil (although not in relative terms) after the reform in these districts. Blacks were most disadvantaged when compared with Anglos in urban fringe and small town-rural areas with almost no change as a result of the reform. They improved their local revenue advantage in central city school districts to a small extent. Poor pupils were significantly worse off than non-poor pupils in regard to local revenue raised in central city and urban fringe districts, both before and after the reform. Poverty students were also disadvantaged with respect to non-poor pupils in every other area, although the differences were not statistically significant.

State revenue was predicted to have an equalizing effect on the intergroup disparities in local revenue. Indeed, Table 28 shows that this was the tendency. Chicano pupils benefited from greater increases in state aid than any of the other ethnic groups as a consequence of the reform. However, the amount of the state aid advantage was not large enough to compensate for the large inter-ethnic disparities that persist in local revenue. Black pupils in central cities remained at a slight relative disadvantage in the

TABLE 27

MEAN LOCAL REVENUE PER PUPIL FOR EACH ETHNIC AND INCOME GROUP BY COMMUNITY TYPE IN TEXAS SCHOOL DISTRICTS: 1974-75 AND 1975-76

Ethnic & Income Groups By Community Type	Local Revenue Per Pupil By Year			
	1974-75	Minority-Anglo (Minority/Anglo)	1975-76	Minority-Anglo (Minority/Anglo)
Central City Avg.	$524		$584	
Significance	***		***	
Black	611	$ 69 (1.13)	694	$ 95 (1.16)
Anglo	542		599	
Chicano	423	-$119 (.780)	470	-$129 (.785)
Significance	**		**	
Poor	478	-$ 60 (.888)	529	-$ 72 (.880)
Non Poor	538		601	
Urban Fringe Avg.	$550		$605	
Significance	***		***	
Black	499	-$100 (.833)	547	-$110 (.833)
Anglo	599		657	
Chicano	341	-$258 (.569)	382	-$275 (.581)
Significance	**		*	
Poor	439	-$124 (.780)	486	-$132 (.786)
Non Poor	563		618	
City (1,000 + ADA) Avg.	$480		$559	
Significance				
Black	448	-$ 58 (.885)	514	-$ 73 (.876)
Anglo	506		587	
Chicano	436	-$ 70 (.862)	518	-$ 69 (.882)
Significance	ns			
Poor	429	-$ 70 (.860)	505	-$ 76 (.869)
Non Poor	499		581	
Small Town & Rural Avg.	$607		$705	
Significance				
Black	500	-$107 (.824)	579	-$124 (.824)
Anglo	607		703	
Chicano	673	$ 66 (1.11)	789	$ 86 (1.12)
Significance				
Poor	532	-$ 52 (.911)	614	-$ 58 (.914)
Non Poor	584		672	

Significance Levels:
* = .05
** = .01
*** = .001

TABLE 28

MEAN STATE REVENUE PER PUPIL FOR EACH ETHNIC AND INCOME GROUP BY COMMUNITY TYPE IN TEXAS SCHOOL DISTRICTS: 1974-75 AND 1975-76

Ethnic & Income Groups By Community Type	State Revenue Per Pupil By Year			
	1974-75	Minority-Anglo (Minority/Anglo)	1975-76	Minority-Anglo (Minority/Anglo)
Central City Avg.	$480		$622	
Significance	***		***	
Black	447	-$39 (.920)	579	-$43 (.931)
Anglo	486	$14 (1.03)	622	$37 (1.06)
Chicano	500		659	
Significance			*	
Poor	488	$10 (1.02)	639	$22 (1.04)
Non Poor	478		617	
Urban Fringe Avg.	$491		$615	
Significance	**		***	
Black	487	$1 (1.00)	617	$14 (1.02)
Anglo	486	$33 (1.07)	603	$66 (1.11)
Chicano	519		669	
Significance			*	
Poor	509	$20 (1.04)	646	$35 (1.06)
Non Poor	489		611	
City (1,000 + ADA) Avg.	$527		$672	
Significance	*			
Black	568	$36 (1.07)	720	$54 (1.08)
Anglo	532	-$32 (.940)	666	-$ 3 (.995)
Chicano	500		663	
Significance				
Poor	530	$4 (1.01)	689	$24 (1.04)
Non Poor	526		665	
Small Town & Rural Avg.	$531		$656	
Significance				
Black	583	$49 (1.09)	726	$70 (1.11)
Anglo	534	-$47 (.912)	656	-$43 (.934)
Chicano	487		613	
Significance				
Poor	527	$14 (1.03)	667	$21 (1.03)
Non Poor	513		646	

Significance Levels:
* = .05
** = .01
*** = .001

amount of state aid and those in other locales increased their very slight advantage with respect to Anglo pupils. Poor pupils improved very little their slight advantage in regard to state aid over non-poor pupils in all community types.

When local and state revenues are combined in Table 29, the degree of "simple ethnic neutrality" in the school finance system can be ascertained. The impact of the 1975 reform in closing the gap between ethnic minority and Anglo pupils was so small as to be almost inconsequential. Chicano pupils are still the most disadvantaged in central cities, their urban fringes and moderate sized cities. Their relative disadvantage in suburban districts is as large as $275 per pupil after the reform. They remain the most advantaged group in small town-rural areas. Blacks maintained their advantage relative to Anglos in central city districts and were still the most disadvantaged group in small town-rural districts. Anglo pupils continue to be the most advantaged in the urban fringes of central cities and in nonmetropolitan cities with enrollments of 1,000 or more pupils. The gap between poor and non-poor pupils remained almost the same after the reform, with poor pupils at a disadvantage in all types of communities.

As indicated earlier, federal revenue increased slightly more than state aid in the first year following the state reform law of 1975. The increase in federal revenue by ethnic group within community types can be seen in Table 30. The greatest change occurred in central city school districts with a 42 percent increase, and districts in the urban fringes of central cities experienced a

TABLE 29

MEAN LOCAL + STATE REVENUE PER PUPIL FOR EACH ETHNIC AND INCOME GROUP BY COMMUNITY TYPE IN TEXAS SCHOOL DISTRICTS: 1974-75 AND 1975-76

Ethnic & Income Groups By Community Type	Local + State Revenue Per Pupil 1974-75	Minority-Anglo (Minority/Anglo)	1975-76	Minority-Anglo (Minority/Anglo)
Central City Avg.	$1,004		$1,206	
Significance	***		***	
Black	1,058	-$ 31 (1.03)	1,273	$ 53 (1.04)
Anglo	1,027		1,220	
Chicano	923	-$104 (.899)	1,129	-$ 91 (.925)
Significance	**		**	
Poor	966	-$ 50 (.951)	1,167	-$ 51 (.958)
Non Poor	1,016		1,218	
Urban Fringe Avg.	$1,042		$1,219	
Significance	***		***	
Black	986	-$ 98 (.910)	1,164	$ 19 (.985)
Anglo	1,084		1,260	
Chicano	860	-$224 (.793)	1,050	-$ 71 (.943)
Significance	*		*	
Poor	948	-$104 (.901)	1,133	-$ 96 (.922)
Non Poor	1,052		1,229	
City (1,000 + ADA) Avg.	$1,007		$1,231	
Significance	**			
Black	1,015	-$ 23 (.978)	1,234	-$ 96 (.924)
Anglo	1,038		1,253	
Chicano	936	-$102 (.902)	1,182	-$210 (.833)
Significance	*			
Poor	960	-$ 65 (.937)	1,194	-$ 52 (.958)
Non Poor	1,025		1,246	
Small Town & Rural Avg.	$1,138		$1,360	
Significance				
Black	1,083	-$ 58 (.949)	1,305	-$ 54 (.960)
Anglo	1,141		1,359	
Chicano	1,160	$ 19 (1.02)	1,402	$ 43 (1.03)
Significance				
Poor	1,060	-$ 37 (.966)	1,281	-$ 37 (.972)
Non Poor	1,097		1,318	

Significance Levels:
* = .05
** = .01
*** = .001

TABLE 30

MEAN FEDERAL REVENUE PER PUPIL FOR EACH ETHNIC AND INCOME GROUP BY COMMUNITY TYPE IN TEXAS SCHOOL DISTRICTS: 1974-75 AND 1975-76

Ethnic & Income Groups By Community Type	Federal Revenue Per Pupil By Year			
	1974-75	Minority-Anglo (Minority/Anglo)	1975-76	Minority-Anglo (Minority/Anglo)
Central City Avg.	$ 97		$138	
Significance	***		***	
Black	86	-$ 6 (.935)	128	$ 7 (1.06)
Anglo	92		121	
Chicano	114	$22 (1.24)	171	$50 (1.41)
Significance			**	
Poor	107	$13 (1.14)	156	$24 (1.18)
Non Poor	94		132	
Urban Fringe Avg.	$ 36		$ 47	
Significance	***		***	
Black	47	$21 (1.81)	65	$34 (2.10)
Anglo	26		31	
Chicano	81	$55 (3.12)	111	$80 (3.58)
Significance	***		***	
Poor	62	$29 (1.88)	84	$42 (2.00)
Non Poor	33		42	
City (1,000 + ADA) Avg.	$ 90		$105	
Significance	***		***	
Black	75	$13 (1.21)	89	$18 (1.25)
Anglo	62		71	
Chicano	156	$94 (2.52)	184	$113 (2.59)
Significance	***		***	
Poor	123	$47 (1.62)	144	$56 (1.64)
Non Poor	76		88	
Small Town & Rural Avg.	$ 64		$ 74	
Significance	*		**	
Black	92	$39 (1.74)	92	$31 (1.51)
Anglo	53		61	
Chicano	95	$42 (1.79)	115	$54 (1.88)
Significance				
Poor	88	$28 (1.47)	99	$30 (1.43)
Non Poor	60		69	

Significance Levels:
* = .05
** = .01
*** = .001

30 percent increase. The relative advantage of both Chicano and Black pupils can be seen to be improved in the year following the reform law. Thus, federal revenue can be said to be slightly more equalizing after the reform than before.

Disparities by District Ethnic and Income Composition

To this point we have analyzed the average revenues for various ethnic and income groups statewide and within community types in order to discern fairly gross patterns of disparities among groups. Another approach to examining the ethnic and income factors in school finance systems is by classifying districts by their ethnic or income composition. This allows a closer examination of districts with high proportions of a minority or income group in comparison with districts with low concentrations of that group.

Two methods of analysis are used in examining the relationship between percent ethnic or income group and school finance indicators. First, the Pearson correlation coefficient provides a single-number index of the degree of linear association between two variables. The correlations are weighted by district size since the impact on pupils is of interest. In order to examine more closely the bivariate relationship, a second analytic approach was used. Districts were categorized by percent ethnic enrollment, and category pupil mean on the school finance measures are compared with analysis of variance. By comparing means among the various

categories, non-linear relationships not indicated by the correlation coefficients can be discerned, and the actual dollar value of revenue at each level of district ethnic composition is presented.

As a prelude to examining revenue disparities, district wealth will be related to ethnic and income composition of school districts. Table 31 presents Pearson correlations and regression weights between school district wealth (as measured by MSA market values) per pupil, and ethnic and income composition of school districts for the year before and the year after the reform. The differences in the correlations among the various community types indicate that community type frequently interacts with ethnic composition in its relationship with district wealth. For example, percent Chicano enrollment has a strong inverse relationship with school district wealth in central cities, but a near zero positive relationship with district wealth in small town-rural areas. Thus, the greater the percentage of Chicanos in a central city district, the less the property wealth, but in small town and rural districts, the percentage of Chicano pupils does not help predict a district's wealth.

The reverse is true for percent Black enrolled: in central cities, the greater the proportion of Black pupils in a district, the greater that district's property wealth. This may indicate that districts with high percentages of Black pupils -- located in the industrial centers of Houston and Dallas in particular -- are higher in property wealth than districts with high percentages of

TABLE 31

PEARSON CORRELATIONS RELATING DISTRICT WEALTH BY COMMUNITY TYPE TO REVENUE MEASURES AND ETHNIC/POVERTY CONCENTRATION IN TEXAS SCHOOL DISTRICTS - BEFORE AND AFTER REFORM

School Finance Measures by Community Type	School District Wealth Per Pupil (1974)	
	1974-75 (Before Reform)	1975-76 (After Reform)
Percent Chicano		
Central City	-.734**	-.728**
Suburban	-.435**	-.432**
City (1,000+ ADA)	-.066	-.061
Small Town & Rural	.091	.070
Percent Black		
Central City	.864**	.870**
Suburban	-.066	-.077
City (1,000+ ADA)	-.079	-.072
Small Town & Rural	-.095	-.086
Percent Minority		
Central City	-.236**	-.203**
Suburban	-.429**	-.432**
City (1,000+ ADA)	-.116	-.109
Small Town & Rural	.030	.024
Percent Poor		
Central City	-.640**	-.642**
Suburban	-.358**	-.347**
City (1,000+ ADA)	-.153*	-.154*
Small Town & Rural	-.055	-.057
Mean Family Income		
Central City	.897**	.897**
Suburban	.351**	.345**
City (1,000+ ADA)	.216**	.219**
Small Town & Rural	.140	.138
Total Effective Tax Rate		
Central City	-.322**	-.132*
Suburban	-.402**	-.316**
City (1,000+ ADA)	-.475**	-.438**
Small Town & Rural	-.303**	-.252*
Local+State Rev. Per ADA		
Central City	.735**	.801**
Suburban	.869**	.876**
City (1,000+ ADA)	.628**	.514**
Small Town & Rural	.646**	.505**

NOTE: All correlations are weighted by number of pupils in average daily attendance.

Significance levels: *= .01, **= .001

Chicano pupils, such as those in San Antonio, El Paso, Corpus Christi, and Brownsville. Personal income has only a very small correlation with school district wealth statewide, but within central city and urban fringe areas the relationship is very strong. Percent of children from poverty families has a strong inverse relationship, and mean family income a strong direct relationship, with district property wealth in central cities, a moderate relationship in suburban areas, a small but significant relationship in non-metropolitan cities, and no significant relationship in small town or rural areas. This strong interaction between locale, personal income and property wealth will be explored in more detail in a later section.

The interesting finding after controlling for community type is that the relationship between percent ethnic enrollment and property wealth is dramatically different for the different ethnic groups within central cities. For districts in the 21 SMSAs, there is a very strong positive correlation between percent Black enrolled and district property wealth, and a very strong negative correlation between percent Chicano enrolled and district property wealth. This indicates that any reform which is designed to equalize by property wealth alone will benefit considerably the predominately Chicano districts. However, it will not benefit, and may work to the relative disadvantage of districts with high proportions of Black pupils, at least in central cities. This is not atypical of the dilemma that school finance experts face when considering the equity consequences of various proposals for reform: an equalization formula may benefit one ethnic group and work to the relative disadvantage

for another, depending on each group's locus with respect to property wealth. In order to benefit both groups, factors other than property wealth must be included in the state aid distribution formula.

From Table 32 it is apparent that the 1975 reform in Texas had some favorable consequences for both Black and Chicano districts, but the effects were very small. The inverse relationship between percent Chicano enrollment and the amount of local plus state revenue available per pupil for education decreased only very slightly between pre- and post-reform years for districts in each community type except small town-rural. The strong positive relationship between percent Black and local plus state revenue increased very slightly in central city districts. For other community types, the correlation between percent Black and the amount of local plus state revenue available for education remained insignificant. The inverse correlation between percent poor and spending level was very similar to that with percent Chicano pupils, with only a small decrease occurring between the two years.

The Pearson correlation coefficient utilized in this section provided a single index of the linear relationship between two variables. It could not detect non-linear relationships of how much of a change in one variable is associated with a unit of change in the other variable. The next few sections examine, on the one hand, the extent and nature of the relationships among percent ethnic group membership and mean family income, and the various educational revenues by source, on the other. Districts are first ranked by the

TABLE 32

PEARSON CORRELATIONS RELATING LOCAL + STATE REVENUE PER PUPIL BY COMMUNITY TYPE TO REVENUE MEASURES AND ETHNIC/POVERTY CONCENTRATION IN TEXAS SCHOOL DISTRICTS BEFORE AND AFTER REFORM (1974-75 & 1975-76)

School Finance Measures by Community Type	Local + State Revenue Per Pupil	
	1974-75 (Before Reform)	1975-76 (After Reform)
Percent Chicano		
Central City	-.649**	-.605**
Suburban	-.534**	-.506**
City (1,000+ ADA)	-.262**	-.158*
Small Town & Rural	.036	.058
Percent Black		
Central City	.566**	.664**
Suburban	-.113	-.113
City (1,000+ ADA)	.030	.009
Small Town & Rural	-.087	-.077
Percent Minority		
Central City	-.393**	-.225**
Suburban	-.543**	-.519**
City (1,000+ ADA)	-.293**	-.179*
Small Town & Rural	-.019	.011
Percent Poor		
Central City	-.595**	-.569**
Suburban	-.491**	-.459**
City (1,000+ ADA)	-.348**	-.234**
Small Town & Rural	-.147	-.134
Mean Family Income		
Central City	.675**	.740**
Suburban	.459**	.400**
City (1,000+ ADA)	.384**	.279**
Small Town & Rural	.251	.238**
Total Effective Tax Rate		
Central City	.229**	.404**
Suburban	-.094	.009
City (1,000+ ADA)	-.180**	-.067
Small Town & Rural	-.076	.022

NOTE: All correlations are weighted by number of pupils in average daily attendance.

Significance levels:
* = .01
** = .001

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independent variable (percent ethnic group membership or mean family income), then divided into groups. Pupil means on the dependent variable (revenues) are computed for each group and compared by analysis of variance, and the results are reported in the tables. Comparisons were made using the Scheffe test to determine just which groups are significantly different from one another, but for the sake of brevity the results of these are not presented in the tables.

Disparities by Categories of Percent Chicano. In order to assess extent of the impact of the reform on pupils in districts of different ethnic composition, districts were divided into four categories: 0-25, 25-50, 50-75 and 75-100 percent Chicano enrollment. The economic and demographic characteristics of these categories are presented in Table 33. The 160 districts with a predominance of Chicano pupils (50 percent or more) are clearly different from other districts in regard to district property wealth and personal wealth. The predominately Chicano districts have about one-half the property wealth per pupil of other districts and proportionately twice as great an incidence of poverty. Districts with a majority of its pupils of Spanish-surname also tend to be more urban than other districts. While these districts contain less than 20 percent of all pupils in the state, they have over 60 percent of all Chicano pupils in the state.

Tax rates are higher yet local revenues far less in the predominately Chicano districts than in other districts. Table 34 indicates that before the reform districts with high concentrations

TABLE 33

ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF TEXAS SCHOOL DISTRICTS BY PERCENT MEXICAN AMERICAN PUPILS ENROLLED

Percent Mexican American Enrolled	Estimated Property Value/ADA (1974)	Percent Poverty Pupils (1970)	Percent Urban Popul. (1970)	Percent of All Pupils (1974-75)	Percent of All Chicano Pupils (1974-75)	Number of Districts (1974-75)
State Mean	$63,378	21.4%	79.2%			
Significance	***	***	***			
0 - 24.9%	68,636	16.0%	78.9%	71%	28%	780
24 - 49.9%	77,408	26.0	69.9	9	12	150
50 - 74.9%	40,662	30.1	89.1	12	32	87
75 -100.0%	32,374	54.2	76.7	7	28	73

Significance Levels:

* = .05
** = .01
*** = .001

TABLE 34

MEAN TAX EFFORT EDUCATION AND LOCAL REVENUE PER PUPIL
BY PERCENT CHICANO ENROLLMENT IN
TEXAS SCHOOL DISTRICTS, 1974-5 and 1975-6

Percent Chicano Enrollment	Total Effective Tax Rate (Mills)	High-Low (High/Low)	Local Revenue Per ADA	High-Low (High/Low)
1974-5 Average	9.0		$529	
Significance	***		***	
0 - 24.9%	8.8		584	
25 - 49.9%	8.5	.7 (1.08)	518	-$302 (.483)
50 - 74.9%	10.0		364	
75 - 100.0%	9.5		282	
----------Reform Law Passed----------				
1975-6 Average	10.1		$596	
Significance	***		***	
0 - 24.9%	10.0		652	
25 - 49.9%	9.2	.4 (1.04)	615	-$350 (.460)
50 - 74.9%	10.9		441	
75 - 100.0%	10.4		302	

Significance Levels:

* = .05
** = .01
*** = .001

of Chicano students (of 75-100 percent Chicano enrollments), were raising $302 less per pupil than districts of fewer than 25 percent Chicano enrollment. After the reform, the disparity in local revenue between these two categories widened to $350 per pupil. Districts with high concentrations of Chicano pupils, generally low in property wealth and personal income, were least able to increase their local revenue after the reform in comparison to other districts.

While pupils in the predominately Chicano districts lost ground in regard to local revenue, they gained in state aid under the new law, as Table 35 demonstrates. Since HB 1126 was designed to distribute some of the Foundation aid on the basis of a single-factor index of district market value of taxable property, and since Chicano pupils tend to be located in property-poor districts, this result was to be expected. Compared to the disparity in local enrichment between districts of different Chicano concentrations (shown in Table 35), the state Foundation program aid provided very little to close the gap in local enrichment. In fact, while local enrichment decreased slightly as a result of the reform, the gap in local enrichment between predominately Anglo and predominately Chicano districts actually increased. As noted earlier in the section on wealth-related disparities, the reform law failed to adequately address the problem of equalizing the disparities in the ability of districts to enrich their programs above the foundation level of state funding. Some $50 million in enrichment equalization aid was enacted to address this very problem. But, as can be seen from the figures in Table 35, the aid was so little and spread

TABLE 35

MEAN STATE FOUNDATION AID, LOCAL ENRICHMENT (EXCLUDING DEBT SERVICE) AND STATE EQUALIZATION AID BY PERCENT CHICANO ENROLLMENT IN TEXAS SCHOOL DISTRICTS, 1974-5 & 1975-6

rcent icano rollment	State Foundation Aid Per ADA	High-Low (High/Low)	Local Maint. Enrichment Per ADA	High-Low (High/Low)	State Equaliz. Aid/ADA
74-5 Average	$473		$285		$ 0
gnificance	**		***		
- 24.9%	467		314		0
- 49.9%	372	$10 (1.02)	289	-$161 (.487)	0
- 74.9%	504		192		0
-100.0%	477		153		0
----------Reform Law Passed----------					
75-6 Average	$606		$278		$19
gnificance	***		***		
- 24.9%	589		309		16
- 49.9%	626	$89 (1.15)	277	-$186 (.398)	27
- 74.9%	642		195		31
-100.0%	678		123		38

gnificance Levels:

* = .05
* = .01
* = .001

so widely that the amount of inequality in local enrichment was only maintained at the pre-reform level.

Table 36 shows the total state revenue provided by percent Chicano enrollment when the $50 million in state equalization aid, $25 million in compensatory education aid for the educationally disadvantaged, and non-Foundation program aid are added to the basic Foundation program aid. The $14 per pupil advantage which districts with high concentrations of Chicano pupils (75-100%) enjoyed over those with low concentrations (0-25%) was increased by $80 per pupil as a result of the reform. Districts with high concentrations of Chicano pupils benefited most from the reform. But when local revenue is added to state aid, the large local revenue disadvantage is clearly not sufficiently counteracted by state aid. The dollar gap between districts with high and those with low concentrations of Chicano pupils declined slightly from $288 to $256 per pupil less for the Chicano districts.

A $256 per pupil disadvantage amounts to $5,120 less per year for each classroom of 20 Chicano pupils. The additional revenue that would be available for these Chicano districts would mean they could afford better educational resources. This additional revenue would mean educator's salaries could be increased by about 50 percent in these schools to attract more qualified classroom teachers and develop more individualized programs. Table 37 shows salaries of all educational personnel to be $1,677 less on the average in districts with high concentrations of Chicano pupils compared to districts with low concentrations of Chicano pupils. More than half of this

TABLE 36

MEAN STATE REVENUE AND LOCAL & STATE REVENUE PER PUPIL
BY PERCENT CHICANO ENROLLMENT IN
TEXAS SCHOOL DISTRICTS, 1974-5 and 1975-6

Percent Chicano Enrollment	State Revenue Per ADA	High-Low (High/Low)	Local & State Rev. Per ADA	High-Low (High/Low)
1974-5 Average	$501		$1,030	
Significance			***	
0 - 24.9%	495		1,079	
25 - 49.9%	503	$14 (1.03)	1,021	-$288 (.733)
50 - 74.9%	524		888	
75 - 100.0%	509		791	
----------Reform Law Passed----------				
1975-6 Average	$636		$1,232	
Significance	* **		***	
0 - 24.9%	619		1,271	
25 - 49.9%	665	$94 (1.15)	1,280	-$256 (.799)
50 - 74.9%	667		1,108	
75 - 100.0%	713		1,015	

Significance Levels:

* = .05
** = .01
*** = .001

TABLE 37

AVERAGE SALARY OF EDUCATIONAL PERSONNEL BY PERCENT CHICANO PUPILS ENROLLED IN TEXAS SCHOOL DISTRICTS, 1974-5 and 1975-6

Percent Chicano Enrollment	Average Salary of Personnel	High-Low (High/Low)	Ave. Salary From Local Enrichment	High-Low (High/Low)
1974-5 Average	$ 9,638		$1,036	
Significance	***		***	
0 - 24.9%	9,904		1,186	
25 - 49.9%	9,364	-$1,653 (.833)	766	-$853 (.281)
50 - 74.9%	9,134		793	
75 - 100.0%	8,251		333	
----------Reform Law Passed----------				
1975-6 Average	$10,800		$1,027	
Significance	***		***	
0 - 24.9%	11,064		1,156	
25 - 49.9%	10,434	-$1,677 (.848)	742	-$731 (.368)
50 - 74.9%	10,429		867	
75 - 100.0%	9,387		425	

Significance Levels:

* = .05
** = .01
*** = .001

disparity ($731) can be attributed to the inability of the predominately Chicano districts to enrich their Foundation program funds with local revenue. Part of the remainder may be due to the difficulties that minority districts encounter in attracting more qualified personnel simply because their schools are viewed as "hardship" assignments. This factor might be the focus of further research.

While personnel salaries increased overall at an average of 12 percent as a result of the reform, the raises were almost the same proportionately across-the-board with no real provision for equalizing salaries written into the law. Although the gap in salary enrichment decreased because of the law, the dollar disadvantage of districts with high percent Chicano enrollments actually increased.

Federal revenue seems to be the one source of income that predominately Chicano districts can rely upon for narrowing the gap with other districts. Table 38 shows the distribution of all federal aid by categories of district percent Chicano enrollment to be far more influential in closing the gap among districts of different ethnicity than state aid, both before and after the reform. Indeed, federal revenue was even more equalizing after than before the reform.

Non-revenue receipts -- primarily of local dollars from the sale of bonds, sale of lands, building and equipment, and net insurance recovery and loans -- like the distribution of local revenue, were greater among the predominately Anglo than

TABLE 38

MEAN FEDERAL AND TOTAL REVENUE PER PUPIL
BY PERCENT CHICANO PUPILS ENROLLED IN
TEXAS SCHOOL DISTRICTS: 1974-5 AND 1975-6

Percent Chicano Enrollment	Federal Revenue Per ADA	High-Low (High/Low)	Non-Revenue Receipts	Total Revenue And Non-Revenue Receipts/ADA	High-Low (High/Low)
1974-5 Average	$ 75		$ 91	$ 1,195	
Significance	***			***	
0- 24.9%	55		99	1,233	
25 - 49.9%	69		63	1,153	
50 - 74.9%	115	$148 (3.69)	83	1,086	-$166 (.857)
75 -100.0%	203		63	1,057	
Reform Law Passed					
1975-6 Average	$ 96		$ 116	$ 1,445	
Significance	***		*	***	
0 - 24.9%	69		131	1,471	
25 - 49.9%	98		139	1,517	
50 - 74.9%	161	$180 (3.61)	34	1,302	-$130 (.912)
75 -100.0%	249		78	1,341	

Significance Levels:

* = .05
** = .01
*** = .001

predominately Chicano districts in the year following the reform. The reason for the greater increase in non-revenue receipts among districts with higher wealth and lower percent Chicano pupil enrollments in the year following the reform is not entirely clear; one explanation might be that receipts from sale of bonds were more readily obtained by the wealthier districts at a time when the state was providing some relief from local spending pressure with the additional state aid. It was only the wealthier districts, however, which appeared to benefit in greater non-revenue receipts.

Total revenue and non-revenue receipts were somewhat less disparate among districts of different percent Chicano enrollments after the reform. However, there still remains a $130 deficit for districts of high concentrations of Chicano pupils as compared to those with low concentrations.

In short, the reform in Texas, while it reduced the inter-ethnic gap in per pupil spending, did not go far enough to eliminate the disparities. Federal revenue helped considerably, even to the point that it seemed to supplement inadequate funding for basic operations among the high percent Chicano districts.

Disparities by Percent Black Enrollment. From Tables 31 and 32 above we learned that there was a very strong direct relationship between percent Black pupil enrollment and the property wealth and spending level for education in central city school districts, where most Blacks in Texas are concentrated. No significant correlation was found upon examining these relationships in suburban, non-metropolitan urban and small town-rural districts. In this

section we will look more closely at the nature of the relationships between percent Black pupil enrollment and various revenue sources for all Texas school districts.

Districts were divided into categories of 0-20, 20-40, 40-60, and 60-100 percent Black enrollment. As Table 39 indicates, approximately half of all Black pupils in the state are located in the two categories of less than 40 percent,and half in the two categories of more than 40 percent Black enrollment. District property wealth is highest in the 40-60 percent Black category, where 46 percent of all Black pupils in Texas attend school. This category contains the two largest districts in the state, Houston and Dallas, both of which are above the state average in property wealth and in total local plus state revenue per pupil. Property wealth is lowest in the 60-100 percent Black enrollment category, which consists of 13 districts with only five percent of all Black pupils in the state. Ten of these districts are small town or rural districts, located primarily in East Texas, with a higher incidence of poverty than the other categories. These last two categories of percent Black, unlike the previous analysis by percent Chicano enrollment, are found at opposite extremes on most of the variables we will examine in this section. Hence, the "gaps" computed in the tables between high and low percent Black districts will not be the extreme values in most cases. In the language of the statistician, we will frequently encounter what is referred to as a non-monotonic relationship.

TABLE 39

ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF TEXAS SCHOOL DISTRICTS BY PERCENT BLACK PUPILS ENROLLED

Percent Blacks Enrolled	Estimated Property Value/ADA (1974)	Percent Poverty Pupils (1970)	Percent Urban Popul. (1970)	Percent of All Pupils	Percent of All Black Pupils	Number of Districts
State Mean	$ 63,378	21.4%	79.2%			
Significance			***			
0 - 19.9%	62,811	21.1	77.7	70%	25%	863
20 - 39.9%	60,201	22.7	69.7	13	24	146
40 - 59.9%	70,552	21.3	93.1	16	46	48
60 -100.0%	31,232	25.0	77.3	1	5	13

Significance Levels:

* = .05
** = .01
*** = .001

Table 40 illustrates this pattern well in regard to local tax revenue. Both before and after the 1975 reform, districts in the 40-60 percent Black enrollment category were levying school taxes at about the state average, and districts of 60-100 percent Black were levying the highest taxes of the four groups identified in the table. Yet, the 40-60 percent Black group was raising more than twice the local revenue per pupil as the 60-100 percent Black group.

State revenue did little to compensate for the lack of local revenue available to the districts of 60-100 percent Black enrollment. Table 41 shows that, prior to the reform, this group of rural Black districts was receiving $21 less per pupil in state aid than districts of 0-20 percent Black, resulting in a $234 per pupil gap between the two groups in local plus state revenue per pupil. After the reform, additional state aid closed this gap in the amount of revenue available for each child's education to $177. The rural Black districts lag even farther behind the urban districts of 40-60 percent Black enrollments -- by $267 per pupil after the reform.

Federal revenue provided no relief of the relative disadvantage in educational revenue available to the small group of rural Black districts in either of the two years of our study. Table 42 indicates that the predominately Black districts were receiving less than the state average and about the same federal aid as districts of 0-20 percent Black enrollment. While the urban districts of 40-60 percent Blacks experienced a 59 percent increase

TABLE 40

MEAN TAX EFFORT FOR EDUCATION AND LOCAL REVENUE PER PUPIL BY PERCENT BLACK ENROLLMENT IN TEXAS SCHOOL DISTRICTS, 1974-5 and 1975-6

Percent Black Enrollment	Total Effective Tax Rate (Mills)	High-Low (High/Low)	Local Revenue Per ADA	High-Low (High/Low)
1974-5 Average	9.0		$529	
Significance	***		***	
0 - 19.9%	9.1		512	
20 - 39.9%	8.3	.8 (1.09)	486	-$213 (.584)
40 - 59.9%	8.9		650	
60 - 100.0%	9.9		299	
----------Reform Law Passed----------				
1975-6 Average	10.1		$596	
Significance	***		***	
0 - 19.9%	10.2		578	
20 - 39.9%	9.0	.4 (1.04)	526	-$218 (.623)
40 - 59.9%	10.2		749	
60 - 100.0%	10.6		360	

Significance Levels:

* = .05
** = .01
*** = .001

TABLE 41

MEAN STATE REVENUE AND STATE + LOCAL REVENUE PER PUPIL BY PERCENT BLACK ENROLLMENT 1974-5 AND 1975-6

Percent Black Enrollment	State Revenue Per ADA	High%-Low% (High%/Low%)	Local + State Revenue Per ADA	High%-Low% (High%/Low%)
1974-5 Average	$501		$1,030	
Significance	***		***	
0 - 19.9%	507		1,019	
20 - 39.9%	553	-$21 (.959)	1,039	-$234 (.770)
40 - 59.9%	432		1,082	
60 - 100.0%	486		785	
----------Reform Law Passed----------				
1975-6 Average	636		$1,232	
Significance	***		***	
0 - 19.9%	642		1,220	
20 - 39.9%	695	$41 (1.06)	1,221	-$177 (.855)
40 - 59.9%	561		1,310	
60 - 100.0%	683		1,043	

Significance Levels:

* = .05
** = .01
*** = .001

TABLE 42

MEAN FEDERAL AND TOTAL REVENUE PER PUPIL
BY PERCENT BLACK ENROLLMENT IN
TEXAS SCHOOL DISTRICTS, 1974-5 and 1975-6

Percent Black Enrollment	Federal Revenue Per ADA	High-Low (High/Low)	Non-Revenue Receipts Per ADA	Total Rev. & Non-Rev. Receipts/ADA	High-Low (High/Low)
1974-5 Average	$ 75		$ 91	$ 1,195	
Significance			***	**	
0 - 19.9%	72		118	1,209	
20 - 39.9%	87	-$2 (.972)	55	1,181	-$351 (.710)
40 - 59.9%	78		6	1,166	
60 - 100.0%	70		3	858	
----------Reform Law Passed----------					
1975-6 Average	$ 96		$ 116	$ 1,445	
Significance			***		
0 - 19.9%	90		140	1,450	
20 - 39.9%	101	-$1 (.989)	99	1,421	-$291 (.799)
40 - 59.9%	124		25	1,459	
60 - 100.0%	89		26	1,159	

Significance Levels:

* = .05
** = .01
*** = .001

in federal revenue from 1974-75 to 1975-76, rural districts of 60-100 percent Black enrollments increased only 27 percent in federal revenue.

Monies from the sale of bonds, lands, loans, insurance, and other non-revenue receipts were almost non-existent among the rural Black districts during 1974-75, averaging $3 per pupil. After the reform, this increased to $26 per pupil, but this same increase was experienced on the average statewide. There remained a $114 per pupil gap in non-revenue receipts between Black and non-Black districts during 1975-76.

When non-revenue receipts are added to local, state and federal revenue, we find very little variation in total dollars per pupil among the first three categories of percent Black enrollment. The fourth category of 60-100 percent Black enrollment stands out in sharp contrast to the first three -- $300 per pupil less than the 40-60 percent category even after the reform was passed.

In sum, the relationship between educational revenues and percent Black pupil enrollment was not a simple linear correlation. The highest level of funding was found in the 40-60 percent category which included large metropolitan districts where almost half of all Black pupils were located. In sharp contrast, the most underfunded districts were about a dozen small town and rural districts with 60-100 percent Black enrollments. These districts are the classic cases of wealth discrimination in which property-poor districts are exerting high tax effort, yet raising half as much in local revenue without adequate compensation from state aid.

The next section examines the distribution of educational revenues by personal income of district residents. The focus of the income analysis is particularly on low-income pupils and how the reform law affected their access to educational inputs.

Disparities by Personal Income. Data were obtained from the 1970 census on mean family income of school district residents for all districts of at least 300 pupils. Districts were then ranked by mean family income and divided into approximate pupil quintiles. The analyses presented in this section compare the mean values of educational revenues among the income quintiles.

Table 43 presents the demographic and economic characteristics of the income groups. There was no statistically significant difference among the various pupil quintiles in market value of property per pupil during 1974. This is consistent with the low positive correlation (.08) between family income and property wealth statewide.[80] As expected, the percent of poverty pupils is inversely related to family income, and percent urban residency is directly related to mean family income. The lowest income quintile of pupils has approximately 40 percent of its pupils from poverty families, and 44 percent of its district residents are rural.

Personal income of district residents is directly related to the amount of tax effort exerted, as can be seen in Table 44. This contributes to a consistent direct relationship between income level of district residents and local revenue for education, a relationship which did not change significantly after the reform.

State aid under the Foundation School Program was somewhat

TABLE 43

ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF TEXAS SCHOOL DISTRICTS BY PUPIL QUINTILES OF MEAN FAMILY INCOME

District Mean Family Income Quintiles*	Estimated Property Value/ADA (1974)	Percent Poverty Pupils (1970)	Percent Urban Popul. (1970)	(Number of Pupils in ADA, (1974-5)
State Mean	$ 63,379	21.4%	79.2%	(2,531,877)
Significance		***	***	
$ 7,685 or Less	59,299	40.2	56.2%	(551,842)
$ 7,686 -$ 9,175	67,111	25.1	69.1	(493,035)
$ 9,176 -$10,315	57,729	18.3	84.5	(496,768)
$10,316 -$11,742	66,958	14.5	93.3	(492,972)
$11,743 or More	66,299	9.0	92.7	(497,259)

*Each quintile contains approximately one-fifth of the total pupils in average daily attendance in districts of 300 or more pupils

Significance Levels:

* = .05
** = .01
*** = .001

TABLE 44

MEAN TAX EFFORT FOR EDUCATION AND LOCAL REVENUE PER PUPIL FOR PUPIL QUINTILES RANKED BY DISTRICT MEAN FAMILY INCOME IN TEXAS SCHOOL DISTRICTS: 1974-5 AND 1975-6

DISTRICT MEAN FAMILY INCOME QUINTILES*	TOTAL EFFECTIVE TAX RATE (MILLS)	HIGH-LOW (HIGH/LOW)	LOCAL REVENUE PER PUPIL	HIGH-LOW (HIGH/LOW)
1974-5 Average	$ 9.0		$ 529	
Significance	***		***	
$ 7,685 or Less	7.7		384	
$ 7,686-$ 9,175	8.5		471	
$ 9,176-$10,315	9.6	2.2 (1.29)	499	$294 (1.77)
$10,316-$11,742	9.3		628	
$11,743 or More	9.9		678	
----------Reform Law Passed----------				
1975-6 Average	$10.6		$ 596	
Significance	***		***	
$ 7,685 or Less	8.6		444	
$ 7,686-$ 9,175	9.2		537	
$ 9,176-$10,315	10.7	2.8 (1.33)	560	$306 (1.69)
$10,316-$11,742	10.6		703	
$11,743 or More	11.4		750	

*Each quintile contains one-fifth of the total pupils in average daily attendance in districts of 300 or more pupils.

equalizing by family income before the reform, and more equalizing after the reform, as indicated by Table 45. The ability or willingness (whichever the case may be) to enrich the state's Foundation program level of funding is directly related to the income level of district residents both before and after the reform. But while the trend toward increasing local enrichment was checked and even reduced in low-income districts following the reform, districts in the highest income quintile continued to increase their enrichment levels, thus increasing the enrichment gap between high and low income districts. State equalization aid did little to counteract this trend toward increasing disparities in local enrichment.

Total state revenue can be seen to have an equalizing effect on the distribution of revenues by income class. Even so, the gap in total local plus state revenue available for education was as great as $191 per pupil in the year prior to the reform. After the reform law, state aid was more equalizing by income, and the gap in local plus state revenue between high and low income quintiles was reduced to $162 per pupil. Considerable wealth discrimination against low-income families in school finance remained in Texas after the reform.

Since Title I monies are distributed according to the number of low-income children enrolled, the amount of federal revenue should vary inversely with the income level of district residents. Indeed, this was the case in both years of our study, as is evident in Table 47. Comparing the extreme quintiles of family income, we find an even greater amount of equalization in the second than

TABLE 45

STATE AID UNDER THE FOUNDATION SCHOOL PROGRAM, LOCAL ENRICHMENT (EXCLUDING DEBT SERVICE) AND STATE EQUALIZATION AID BY PUPIL QUINTILES RANKED BY DISTRICT MEAN FAMILY INCOME IN TEXAS SCHOOL DISTRICTS: 1974-5 AND 1975-6

DISTRICT MEAN FAMILY INCOME QUINTILES*	STATE FDN. AID PER ADA	HIGH-LOW (HIGH/LOW)	LOCAL ENRICHMENT PER ADA	HIGH-LOW (HIGH/LOW)	STATE EQUAL. AID PER ADA	HIGH-LOW (HIGH/LOW)
1974-5 Average	$473		$285		$ 0	
Significance	***		***			
$ 7,685 or Less	504		206		0	
$ 7,686-$ 9,175	500		257		0	
$ 9,176-$10,315	489	-$79 (.843)	272	$146 (1.71)	0	
$10,316-$11,742	442		345		0	
$11,743 or More	425		352		0	
----------Reform Law Passed----------						
1975-6 Average	$606		$278		$19	
Significance	***		***		***	
$ 7,685 or Less	659		181		26	
$ 7,686-$ 9,175	648		234		22	
$ 9,176-$10,315	613	-$112 (.830)	267	$180 (1.99)	23	-$13 (.500)
$10,316-$11,742	557		356		13	
$11,743 or More	547		361		13	

*Each quintile contains one-fifth of the total pupils in average daily attendance in districts of 300 or more pupils.

TABLE 46

MEAN STATE REVENUE AND LOCAL + STATE REVENUE PER PUPIL FOR PUPIL QUINTILES RANKED BY DISTRICT MEAN FAMILY INCOME IN TEXAS SCHOOL DISTRICTS: 1974-5 AND 1975-6

DISTRICT MEAN FAMILY INCOME QUINTILES*	STATE REVENUE PER ADA	HIGH-LOW (HIGH/LOW)	LOCAL + STATE REVENUE PER ADA	HIGH-LOW (HIGH/LOW)
1974-5 Average	$ 501		$ 1,030	
Significance	***		***	
$ 7,685 or Less	548		932	
$ 7,686-$ 9,175	536		1,007	
$ 9,176-$10,315	511	-$103 (.812)	1,010	$191 (1.20)
$10,316-$11,742	459		1,087	
$11,742 or More	445		1,123	
----------Reform Law Passed----------				
1975-6 Average	$ 636		$ 1,232	
Significance	***		***	
$ 7,685 or Less	707		1,151	
$ 7,686-$ 9,175	686		1,223	
$ 9,176-$10,315	638	-$144 (.796)	1,193	$162 (1.14)
$10,316-$11,742	581		1,284	
$11,742 or More	563		1,313	

*Each quintile contains one-fifth of the total pupils in average daily attendance in districts of 300 or more pupils.

TABLE 47

MEAN FEDERAL AND TOTAL REVENUE PER PUPILS FOR PUPIL QUINTILES RANKED BY DISTRICT MEAN FAMILY INCOME IN TEXAS SCHOOL DISTRICTS: 1974-5 AND 1975-6

District Mean Family Income Quintiles*	Federal Revenue Per ADA	Gap: High-Low (High/Low)	Non-Revenue Receipts/ADA	Total Revenue Non-Revenue Receipts/ADA	Gap: High-Low (High/Low)
1974-5 Average	$ 75		$ 91	$ 1,195	
Significance	***		**	***	
$ 7,685 or Less	130		80	1,142	
$ 7,686- $ 9,175	76		65	1,148	
$ 9,176- $10,315	60	-$ 93 (.285)	75	1,145	$ 169 (1.15)
$19,316- $11,742	63		83	1,233	
$11,743 or More	37		151	1,311	
----------Reform Law Passed----------					
1975-6 Average	$ 96		$ 116	1,445	
Significance	***		**	***	
$7,685 or Less	158		85	1,394	
$7,686- $ 9,175	99		83	1,406	
$ 9,176- $10,315	79	-$ 122 (.228)	147	1,424	$ 143 (1.10)
$10,316- $11,742	104		78	1,466	
$11,743 or More	36		188	1,537	

*Each quintile contains one-fifth of the total pupils in average daily attendance in districts of 300 or more pupils.

in the first year. There is, however, an anomaly found in the fourth income quintile, where federal revenues were greater in 1975-76 than all but the lowest income quintile. The fourth quintile contains some of the metropolitan districts which were able to acquire greater amounts of federal revenues no doubt due to their experienced grantsmanship.

Non-revenue receipts were found generally to be disequalizing by income level of district residents. The middle income quintile doubled its non-revenue receipts after the 1975 reform and other income classes increased their non-revenue receipts by lesser amounts. The remarkable disparity in non-revenue receipts that persists after the reform is between the high income quintile and all other income classes.

Combining local, state and federal revenues with non-revenue receipts, we see that a consistent direct relationship is found between income level of district residents and the amount of total funds available for education. The gap between high and low income classes was narrowed only slightly after the 1975 reform. The high-low income quintile gap was as great as $143 per pupil in the total funds available for education even after the reform.

The revenue disparities are translated into unequal educators' salaries among districts of different income class residents. As can be seen from table 48, educational personnel in the lowest income quintile were receiving an average of $1,346 less than persons employed in districts in the highest income class prior to the 1975 reform. Most of this difference could be attributed to differences in the amount of local enrichment above the foundation

TABLE 48

AVERAGE SALARY OF PERSONNEL IN TEXAS SCHOOL DISTRICTS BY PUPIL QUINTILES RANKED BY DISTRICT MEAN FAMILY INCOME, 1974-5 and 1975-6

District Mean Family Income (1970) Quintiles *	Average Salary of Personnel	High-Low (High/Low)	Ave. Salary From Local Enrichment	High-Low (High/Low)
1974-5 Average	$ 9,638		$1,036	
Significance	***		***	
$ 7,685 or Less	8,837		372	
$ 7,686-$ 9,175	9,325	$1,346 (1.15)	653	$1,268 (4.41)
$ 9,176-$10,355	9,614		1,001	
$10,316-$11,742	10,320		1,589	
$11,743 or More	10,183		1,640	
----------Reform Law Passed----------				
1975-6 Average	10,800		1,027	
Significance	***		***	
$ 7,685 or Less	10,044		439	
$ 7,585-$9,175	10,590	$1,281 (1.13)	697	$1,131 (3.58)
$9,176-$10,355	10,774		970	
$10,315-$11,742	11,336		1,508	
$11,743 or More	11,325		1,570	

Significance Levels:

* = .05
** = .01
*** = .001

level. After the reform the salary gap had narrowed only slightly to $1,281, most of which was also accounted for by local enrichment funds.

SUMMARY AND CONCLUSIONS

Texas is a state which lives up to its image as giant in many respects. Texas has the second largest number of school districts in the country--1,095 in 1975-76. With that many local administrative units, inequalities in property wealth are probably greater than any other state and, in turn, disparities in educational revenues abound. Large disparities among school districts in San Antonio a decade ago spurred the filing of the monumental Rodriguez case challenging the wealth discrimination in Texas school finance. The Legislature's first measured response to the inequities cited in Rodriguez came in 1975 with the passage of HB 1126. Our research examined the impact of this reform on wealth discrimination and disparities among pupils of different ethnic and income groups.

The Legislature entered its 1975 biennial session with a giant 1.5 billion dollar surplus in the state treasury, more than most reformers of school finance ever dream of. When the session ended, some $653 million in new state funds had been committed for the financing of education over the next biennium. The additional state aid resulted in a 20 percent increase in revenue available for education during the first year after the law was enacted. The Foundation program's minimum level had been raised

and along with it came an across-the-board increase in teacher salaries and funds for maintenance and operation. Some important changes were also made which may have started Texas on the road to reforming their system of funding education in future legislative sessions:

1. One important change was in the basis for determining state aid under the Foundation program: the outmoded multi-factor "economic index" was replaced by a single-factor index of full market value. Although the validity of the set of values adopted was disputed, the new index did result in more state dollars being distributed to property-poor school districts. Unfortunate for the cause of equity, local enrichment was allowed to continue unabated under the new law and much of the equalization achieved with state aid was undermined by increasing local spending disparities.
2. A "weighted personnel approach" to allocating funds under the Foundation program was adopted which allows for slight differences in pupil counts by grade level.
3. State equalization aid was introduced for the first time to offset the inequalities created by local enrichment disparities. Unfortunately, the aid was limited to $50 million annually, and averaged $23 per pupil with a maximum of $57 per pupil.
4. State compensatory education aid for "educationally disadvantaged" (federal "Title I") students was introduced for the first time. The total allotment, how-

ever, was only $25.4 million, amounting to even less than the mere $40 per disadvantaged student originally estimated.

These were the provisions of the law; now for a look at the actual effects of the law on equity.

Tax Disparities. We found virtually no change in the degree of inequality in tax rates after the first year under the reform law. Tax relief did not result from the reform; tax rates increased slightly on the average.

Spending disparities. We found the amount of inequality in local plus state revenues to decrease slightly in the year after the reform.

Wealth Discrimination. Texas presents us with the classic case of wealth discrimination in school finance. With the large number of school districts, large disparities in property wealth are found among school districts generally. Wealthier districts exert less tax effort than poorer districts, yet raise more local revenues. State aid before the reform did almost nothing to offset the wealth-related disparities in local revenues. After the reform, state aid caused a small reduction in the amount of wealth discrimination, but not sufficient to offset the increasing local enrichment disparities. When tax effort is held constant, the wealth discrimination is still apparent after the reform.

Ethnic and Poverty Discrimination. To understand ethnic and poverty discrimination in school financing, one must first examine the isolation of ethnic and income groups. Ethnic groups are highly isolated by school district boundaries in Texas. Sixty

percent of all Mexican American students are in districts where they constitute more than half of the district enrollment. These districts are primarily located in South Texas. Fourty percent of all Black students in the state are in three large urban school districts -- Houston, Dallas and Fort Worth -- and most of the Black student population is found in the eastern part of the state.

There are considerable differences in property wealth among districts of different ethnic composition. Mexican American pupils tend to be concentrated in property-poor districts; Blacks are in districts of approximately average property wealth; and Anglos on the average are in districts above the state mean in property wealth.

The property wealth disparities among ethnic groups result in spending inequities. Prior to the 1975 reform, districts which were almost all (75-100%) Mexican American were exerting more tax effort, yet raising less than half as much local revenue, and receiving about the same amount of state aid per pupil as districts which were chiefly (75-100%) non-Mexican American. The 1975 law increased the amount of state aid to chiefly Mexican American districts, but not sufficiently to offset the increasing gap in local enrichment. The net result was a slight decline in the amount of revenue disparity among these groups of districts.

The few districts with predominately (60-100%) Black enrollments are low in wealth. These thirteen districts are small and contain only 5 percent of the Black students in the state. About half of the state's Black students are in a few large city districts of 40-60% Blacks; these are above average in property wealth and average in tax effort. These large urban districts

enjoyed a decided revenue advantage because of their elevated local tax base. Prior to the reform, the small, predominately Black districts were raising less than half as much local revenue and with more tax effort than the large urban districts. This disparity remained even after the 1975 legislation. Federal aid went more to the urban districts and thus exacerbated the differences even more.

Disparities among pupils of different family incomes are also large. Because of its nonlinear character, the relationship between personal income and district property wealth is not significant except when examined within certain community types. (The relationship between mean family income and district wealth is .90 for central city school districts, but only .14 for small town and rural areas.) Large disparities in local revenue are found among districts of different income levels, some of which can be attributed to greater tax effort by higher income districts. Indeed, the gap in local enrichment between low and high-income districts was even greater after than before the reform. State aid under the reform does not compensate for these disparities. Federal aid is somewhat more equalizing by income level of district residents than state aid, but is not sufficient to eliminate income-related disparities altogether.

Problems for Future Reform Efforts

More than five years after the Rodriguez case was argued before the U.S. Supreme Court, there remain gross inequities in the system of funding education in Texas. In spite of legis-

lation passed during the 1975 and 1977 sessions, a number of problems are yet unsolved. The most important among them are:

- o The ability of a district to raise funds for local enrichment is still the primary determinant of a school district's ability to provide an adequate educational program. Despite the fact that new state appropriations for education have totaled about $650 million during the 1976-77 biennium and $950 million for 1978-79, only an estimated 63 percent of all educational spending is included under the umbrella of the Foundation School Program. This indicates that any equalization that might be given by one hand under the foundation formula, is taken away by the other in the ability to enrich locally.
- o The state has not yet developed an effective system for measuring property wealth. The local district's share of the Foundation program costs is determined by an estimate of the true market value of taxable property per pupil in a district. But the market value estimates which are available are of questionable validity. This means that the foundation formula for distributing state aid "according to local need" will be only as accurate as the market value estimates on which it is based.
- o A large per capita allotment still provides state funds of more than $220 per pupil to all districts, wealthy and poor. This amount is subtracted from the state aid entitlement under the Foundation program. This means that

wealthy districts continue to enjoy the advantage of a high per capita allotment, and the per capita amount is still subtracted from the "equalized" general revenue appropriations which go to poorer districts.

- Capital expenditures are still supported from locally raised revenues. We found that the amount of capital expenditures is directly related to the size of a district's tax base. Thus, not only do construction costs mean a heavier tax burden on poorer school districts, but the quality of facilities available may be determined by district wealth.
- Hold-harmless provisions in the school finance legislation have continued to subsidize wealth-related inequalities in spending. About 36 percent of all hold-harmless money was spent in school districts with tax bases about three times the state average. (Two districts with more than a million dollars in taxable wealth per pupil, located within the confines of the famous King ranch, were receiving state allocations of $4,767 and $1,265 per pupil due to the hold-harmless provisions in the law.)
- Revenues for the exceptional needs of pupils from linguistically different and poverty backgrounds are token at best under existing state legislation. The amount of "compensatory funding" for bilingual education and the "educationally disadvantaged" is even more deficient in view of the fact that these are the same pupils who are concentrated in school districts with low property wealth.

This last problem--the coincidence of pupils with greater educational needs and low fiscal capacity--is the one which makes school finance inequities so acute in Texas, even after passage of "reform" legislation.

FOOTNOTES

1. The term "reform" is used loosely here to refer to a change in the form of the system of raising and/or distributing revenues for education in a manner which is more equitable. (See the summary report for a discussion of the concept of equity.)

2. Garry Branson, State Policy Making for the Public Schools of Texas, (Columbus, Ohio: The Educational Governance Project, Ohio State University, 1974), p. 2.

3. U.S. Bureau of Census, Census of the Population, 1970: General Social and Economic Characteristics, Final Report PC(1)-C45, p. 433.

4. James E. Anderson, Richard W. Murray, and Edward L. Farley, Texas Politics: An Introduction (New York: Harper and Row, 1971), pp. 30-31.

5. Ibid.

6. Governor's Committee on Public School Education, The Challenge and the Chance, Vol. I (Austin: Texas Education Agency, 1969), p. 19.

7. Branson, State Policy Making, p. 5.

8. U.S. Bureau of Census, Census of the Population, 1970, Final Report PC(1)-C45, p.451.

9. Redistricting of Texas legislative jurisdictions was sparked by a three-judge court decision in the case of White v. Register, which challenged the use of multi-member districts. During their 1975 session, the Texas Legislature reapportioned all of its legislative jurisdictions.

10. U.S. Bureau of Census, Census of the Population, 1970, Final Report PC(1)-C45, p. 451.

11. Ibid, p. 431.

12. Daniel J. Elazar, American Federalism: A View from the States, (New York: Thomas Y. Crowell Co., 1966), pp. 79-116.

13. Mark Yudof and Daniel Morgan, "Rodriquez v San Antonio Independent School District: Gathering the Ayes of Texas--The Politics of School Finance Reform," Law and Contemporary Problems 38 (1974): 383. This article has been most helpful in interpreting the history of school finance in Texas, particularly the philosophical undercurrents of that history.

14. Governor's Committee on Public School Education, The Challenge and the Chance, Vol. I (Austin: 1969), p. 27.

15. Texas Constitution, Vernon's Annotated Civil Texas Statutes, Vol. 2 (Kansas City: 1955), p. 384.

16. Ibid., p. 384

17. Ibid., p. 384.

18. Governor's Committee on Public School Education, The Challenge and the Chance, Vol. V (Austin: 1969), pp. 12-13.

19. Ibid., p. 12.

20. Yudof and Morgan, "Rodriquez v San Antonio ISD," p. 384.

21. Texas Research League, Texas Public School Finance: A Majority of Exceptions, (Austin: 1972), p. 3.

22. Gilmer-Aiken Committee, To Have What We Must (Austin: 1948), p. 16.

23. Texas Research League, Texas Public School Finance, p. 6.

24. Sessions Laws, Fifty-First Regular Session, Art. VI, Sec. 2, Chapter 334, (Austin: 1950), p. 639.

25. Ibid., p. 648. The Minimum Foundation Program established by the Gilmer-Aiken Act covered basically the same kinds of expenses as the Rural Aid Act. It provided:

26. 1) Professional staffing units, based on average daily attendance, including classroom teachers, vocational teachers, librarians, nurses, special education teachers, principals, and superintendents. Small schools generally were granted more staff per pupil than larger schools. State-guaranteed minimum salary schedules reflected educational level and amount of responsibility.

    2) Transportation costs, allotted on a per pupil basis in proportion to the number of students per square mile, with allocations increasing as the students per square mile decreased.

3) Operating allowances per classroom teacher unit were also graduated according to district size. Districts with fewer than 74 teacher units got $400 per unit; districts with more than 85 teacher units were allotted $350 per unit.

27. Texas Research League, Texas Public School Finance, pp. 6-7.

28. Ibid., p. 12.

29. Yudof and Morgan, "Rodriquez v. San Antonio ISD", pp. 386-387.

30. Governor's Committee, The Challenge and the Chance, Vol. V, p. 45.

31. Ibid., p. iii.

32. Arthur E. Wise, Rich Schools, Poor Schools: The Promise of Equal Educational Opportunity (Chicago: The University of Chicago Press, 1968), pp. 148-149.

33. Governor's Committee, The Challenge and the Chance, Vol. I, p. 12.

34. Yudof and Morgan, "Rodriquez v. San Antonio ISD", pp. 389-390.

35. Charles Bartlett, Property Taxes in Texas School Districts (Austin, Texas: Governor's Committee on Public School Education, 1968).

36. Bartlett, Property Taxes in Texas, p. 19.

37. San Antonio Independent School District v. Rodriquez, 411 U.S. 1 (1973).

38. Yudof and Morgan, "Rodriquez v. San Antonio ISD", p. 391

39. Serrano v. Priest, 5 Cal. 3d 584, 487 P. 2d 1241, 96 Cal. Rptr.

40. 337 F. Supp. 280. 285 N. 11 (W.D. Texas, 1971).

41. Gary Branson, State Policy Making for the Public Schools of Texas (Columbus, Ohio: Educational Governance Project, The Ohio State University, 1974), pp. 34-35.

42. For a review of these proposals, see: Yudof and Morgan, "Rodriquez v. San Antonio ISD", pp. 396-399.

43. The State Board of Education, after considerable debate and changes in their original plan, offered to limit local enrichment to a maximum of $300 per pupil beyond the Foundation program level, with the state guaranteeing that amount to any district taxing itself at the required tax level. This essentially amounted to a limited form of district power equalizing or guaranteed tax yield. But such a proposal was too controversial in view of the amount of political power

wielded by the wealthier school districts and was abandoned almost immediately. The Texas State Teachers Association toyed with the idea of recommending adoption of a weighted-pupil Foundation Program similar to that offered by the National Education Finance Project, but this concept, it was feared, would not be easily understood. As might be expected, the TSTA plan amounted mostly to higher program costs relating to job creation and salary increases, not directly to greater equalization. The Joint Senate Interim Committee to Study School Finance commissioned a study by Peat, Marwick, Mitchell & Co. which presented the results of twelve different plans--three separate revenue plans overlaid with four separate distribution plans. The report recommended a preferred plan which put a definite limitation on local enrichment but allowed considerable local discretion in regard to spending state aid. See: Ibid., pp. 396-399.

44. San Antonio ISD v. Rodriquez, 411 U.S. 1 (1973).

45. Morgan and Yudof, "Rodriquez v. San Antonio ISD", p. 402.

46. Ibid., p. 403.

47. Legislative Property Tax Committee, Market Value Study Pilot Project, Phase II: Summary Report (Austin, Texas, 1975), p. 25.

48. For some months after the official estimates of market values were released, the actual methods employed in arriving at the set of values remained shrouded in mystery. It was only after the Legislature had enacted the MSA values into law and adjourned that the procedures were revealed. However, questions still remain about how the values were derived in some of the districts. For a thorough critique of the MSA methodology, see articles by Craig Foster in IDRA Newsletter, September, 1975 and October 1975.

49. Daniel Morgan and Robert Brischetto, "Texas' New School Finance Bill: An Evaluation," Public Affairs Comment 21 (November): 1.

50. Texas Association of School Boards, Prelegislative Seminar on Public School Finance (Austin, Texas: 1977), p. 16.

51. One must keep in mind that this increase did not necessarily mean that all teachers received an increase of $1,400. These are guaranteed minimum pay grades for educators. Teachers employed by a district paying above the minimum need not legally receive such an increase.

52. Morgan and Brischetto, "Texas' New School Finance Bill" p. 3.

53. Calculated from: Ester O. Tron, ed., Public School Finance Programs, 1975-76 (Washington,D.C.: U.S. Government Printing Office, 1976), pp. 333-359.

54. The language of HB 1126 provided that all districts with up to 125 percent of the state average property value per ADA would be eligible to receive enrichment equalization aid of up to $70 per ADA, with the entitlement to be prorated in inverse proportion to local wealth. The bill, however, limited the aid to a sum certain appropriation of $50 million, and stipulated that local entitlements would be proportionately reduced if the cost of the equalization aid exceeded the appropriated funds.

55. Morgan and Brischetto, "Texas' New School Finance Bill", p. 3.

56. According to the Texas Education Agency, 694 districts, or about 64 percent of all Texas school districts in 1977-78, have ADA of less than 1,000 and 485 of those districts have ADA of less than 500 students.

It is of course, hard to provide an adequate educational program in very small school districts. Back in 1949, the Gilmer-Aiken committee recommended that all districts with enrollments of less than 750 students be forced to consolidate. The legislators were unwilling to mandate consolidation. Over the years provisions to encourage consolidation have been added to the law, but sparsity formula elements also help to preserve small districts. The number of small school districts has, however, declined. In 1946-47, there were 5,351 school districts in Texas. By 1966, the number had declined to 1,303, with 927 of those districts having enrollments of less than 1,000. As indicated above, today there are 694 districts with enrollments of less than 1,000 ADA.

57. Prior to the 1975-76 school year, special education and vocational education personnel units were not deducted from regular program units -- in essence, districts received double funding for all students enrolled in those programs. House Bill 1126 attempted to correct that problem by requiring that districts maintain records of the number of contact hours that students were enrolled in special or vocational education. Contact hours were converted into the number of "full time equivalent" (FTE) hours that would produce a regular ADA, and the FTE equivalents of ADA were deducted from regular personnel unit entitlements.

58. Texas Research League, Texas Public School Finance, p. 7.

59. State Comptroller's Office, "Biennial Revenue Estimate, 1978-79," (Austin: 1977), p. 10.

60. Texas Education Agency, "Comparison of State Aid: HB 1126 and CSSB 1," computer printout dated November 30, 1977.

61. Texas Education Code, Section 16.254(d).

62. Texas Education Code, Section 16.252(a).

63. Texas Education Code, Section 16.101.

64. While it is generally acknowledged that neither study provided truly valid estimates, those provided by GOER were substantially more carefully derived, as indicated by the relative costs involved: $150,000 for the MSA study as compared to $2.5 million for the GOER study. For a more detailed discussion of the methods used in these studies, see: for the MSA study, Candice Clark, Report on Analysis of MSA Values for 100 Randomly Selected Districts, 1975, unpublished report available at the IDRA Property Tax Project, Austin, Texas; for the GOER study, Public School Finance Study: A Report of Findings and Recommendations, Austin, Texas: The Governor's Office of Education Resources, February 1, 1977.

65. Russell S. Harrison, Equality in Public School Finance: Validated Policies for Public School Finance Reform (Lexington, Mass.: D.C. Heath & Co., 1976), p. 21.

66. Ibid, p. 21.

67. John C. Bollens, Special District Governments in the United States (Berkeley: University of California Press, 1961), p. 216, 211. Paul R. Mort et al., Public School Finance (New York: McGraw-Hill, 1960, 3rd Ed.), p. 243.

68. Harrison, Equality in Public School Finance, pp. 21-22.

69. The effects of pupil weightings on the various types of analyses are discussed in Chapter 2 of the main body of the six states report.

70. Lee S. Friedman and Michael Wiseman, "Understanding the Equity Consequences of School Finance Reform," Harvard Educational Review 48 (May, 1978), pp. 193-226.

71. Ibid., p. 202.

72. In our research we used the F-test statistic first to determine whether there are significant differences among the groups, then tested each pair of groups for significance of differences with a post-hoc test, the Scheffe test. The results of the one-way F-tests are shown in the tables, but for economy of presentation, the Scheffe test results are not shown but only discussed where appropriate.

73. Both MSA and GOER estimates of district property wealth are used for comparison purposes. For cross-year comparisons, however, the MSA values for 1974 should be used. While this does not take into consideration changes in district wealth, it is a more valid comparison than if MSA and GOER values were compared since different methodologies were used in collecting the estimates.

74. The three major ethnic groups in Texas are Mexican Americans or Chicanos, Blacks and Anglos. Of these, Blacks and Mexican Americans are classified as "ethnic minorities." Other ethnic minorities might include American Indians and Asian Americans, but they constitute less than .5 percent of the total population and are thus not separated out in the analyses presented in this report.

75. The poverty level is determined by the Orshansky Index. Percent of children age 5-17 living in families below the poverty level from the 1970 census, fifth count, by 1974-78 school district boundaries was the variable used to indicate incidence of poverty among Texas school pupils.

76. Texas Department of Community Affairs, Poverty in Texas, 1973 (Austin, Texas: Texas Department of Community Affairs, 1974), p. 10.

77. Degrees of freedom for these tests were based on the total number of districts rather than the number of pupils since each district represents an independent observation. However, a district's size in ADA was used to compute its relative weight in the analyses.

78. Non-revenue receipts include monies from sale of bonds, lands, buildings and equipment, net insurance recovery, and loans.

79. Betsy Levin, Thomas Muller and Corazon Sandoval, The High Cost of Education in Cities. (Washington, D.C.: The Urban Institute, 1973).

80. The realtionship between personal and district property wealth is explored more carefully controlling for community type in a later section of this report.